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FINAL REPORT

Audience Preferences at Flaming Gorge National Recreation Area
and Cranberry Mountain Visitor Center VIS Facilities
(project 16-437-CA)

Submitted to the
Rocky Mountain Forest and Range
Experiment Station
Fort Collins, Colorado

Perry J. Brown
Nancy L. Bester
Richard C. Knopf

Department of Recreation Resources
Colorado State University
Fort Collins, Colorado 80523

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SUMMARY

The purpose of the study was to identify characteristics of visitors at different interpretive settings within Flaming Gorge National Recreation Area of Utah and Cranberry Mountain of the Monongahela National Forest in West Virginia. Data were collected at visitor centers and amphitheatres and then analyzed according to the type of interpretive settings. This section summarizes the information. Recommendations are also included to aid VIS personnel in further meeting the desires of visitors through VIS programming. Finally, some concluding remarks are made to aid in the implementation of the results of the questionnaire studies to VIS program planning.

Visitor Centers

Three visitor centers were used in the study: Dam Visitor Center and Red Canyon Visitor Center of Flaming Gorge, and Cranberry Mountain Visitor Center. Personnel at Flaming Gorge believed that the Dam Visitor Center facilitated visitor orientation while Red Canyon Visitor Center emphasized interpretive programming. The Cranberry Mountain Visitor Center placed equal emphasis on both program themes. Comparing the results from the three visitor centers leads to several common points and differences among their audiences.

Points in Common

Similar levels of importance were expressed by visitors at all the centers for the reasons for participating in center activities. Visitors

found such reasons as looking at exhibits, experiencing natural stimuli, getting information about the area, exploration-learning, and learning about what to do in the area to be quite important reasons for participating. Conversely, visitors attached little importance to affiliation among unknown people and for lack of something better to do.

Similar levels of interest were expressed by visitors at all the centers in information desires. Highest levels of interest were shown for natural and cultural history information, with orientation types of information of moderately high interest.

Among recreational activities, auto driving for sightseeing was most popular at all the centers, with high levels of participation also expressed for camping, picnicking, fishing, and swimming. The less popular activities included trailbiking, motorcycling, and rock-collecting.

Over half of the visitors at each center had never visited the site previously. Over one-third of the visitors at each site were planning on staying in the area one day or less.

Among the points in common from the socioeconomic descriptors, the results from all the centers showed that over three-fourths of the visitation came from people who resided within the same multi-state region as where the center was located. In addition, the largest proportion of respondents came in groups of 3 to 5 people.

Finally, a few of the audience types developed from cluster analysis appeared across all the settings. In particular, a group of visitors appeared in each study who attached little or no importance to any of the five experience dimensions examined. In addition, another group was observed showing similar patterns of high importance for all dimensions except utility-service.

Points of Difference

The Dam Visitor Center received roughly twice as much visitation as the other centers and is located on a major thoroughfare. Both the Red Canyon Visitor Center and Cranberry Mountain Visitor Center are located in more remote places and have less visitation.

Visitors at Flaming Gorge showed a noticeably higher percentage of visitors who had never been to the area before. There was little difference between Red Canyon and the Dam Visitor centers, however (73 and 70 percent, respectively). Fifty-seven percent of the visitors at Cranberry Mountain said they had never visited the site before.

Among all the centers, visitors at Red Canyon Visitor Center tended to spend more time in the area, while Cranberry Mountain showed the highest percentage of day-use visitation. Also, approximately half the visitors at Flaming Gorge indicated that Flaming Gorge was their primary trip destination, and only 40 percent of the visitors at Cranberry Mountain claimed that the West Virginia setting was their primary destination. These results may reflect the accessibility of the visitor centers to areas of high population where the visitors originated.

Among the socioeconomic profile differences, half of the respondents at Flaming Gorge acknowledged the presence of children in their group, while only 44 percent indicated the same at Cranberry Mountain. Flaming Gorge audiences tended to have more college-level training, and with the highest percentage of people across settings having five or more years of college. Cranberry Mountain had the highest proportion of visitors who did not complete high school. Equal proportions of male and female respondents were found at each setting except at Red Canyon Visitor Center, where there were 14 percent more males than females. Cranberry Mountain tended to have a higher proportion of its visitors between the ages of 18 and 33 years old.

Results from the cluster analysis indicate audience types at Cranberry Mountain showed the dimensions of introspection and utility-service were slightly more important to them as reasons for coming to the visitor center than they were at the Flaming Gorge settings.

Recommendations

The purpose of the study was to begin to build an information base of VIS visitor center audience characteristics which would be useful in the design of VIS programming. Some of the findings have pertinence to VIS programming, regardless of locale. The following is a list of recommendations derived from those findings.

- (1) Visitors across the settings expressed highest interest in experiences organized around natural themes. Visitors expressed less interest in orientation themes. Personnel can incorporate such knowledge about visitor preferences in the allocation of time, space, and money for VIS programming.
- (2) Based on the results from Red Canyon and Dam visitor centers at Flaming Gorge, there was little difference in the reasons visitor gave for coming to visitor centers. In both settings, orientation themes were secondary to natural themes. Personnel might reconsider the use of the orientation theme at the Dam Visitor Center so that a new program theme might be more accommodating to visitor preferences. A natural theme would probably be more favorably received among visitors.
- (3) The age and education socioeconomic descriptors at all settings indicate that VIS audiences are composed of a diversity of people. The implications are that programs should be created that vary in the complexity of their content.

- (4) From one-fourth to half of the visitors had visited the respective settings previously. Programs should be designed to hold the interest of repeat visitors. In addition, a variety of program topics would hold the interests of visitors who tend to stay longer in the area.
- (5) At all of the settings, visitors attached importance to the visitor center as an environment for teaching children. Parts of programs developed entirely for children would be well received by most visitors.
- (6) At all of the settings, introspection and utility-service functions were not given much importance as a reason for participating. Efforts to develop programs which substantiate these reasons may be more wisely focused on developing the other dimensions instead.
- (7) Auto driving for sightseeing was the most popular recreational activity at each of the settings. Personnel might consider using this activity as a vehicle through which further programming can be developed (e.g., auto-tape tours).

Amphitheatres

Three amphitheatre settings were used in the study and were associated with campground areas within Flaming Gorge National Recreation Area. Although the presentations and media used for VIS programming at amphitheatres differ from those in visitor centers, audience profiles can be compared to develop similarities and differences between the two types of VIS audiences within Flaming Gorge National Recreation Area.

Points in Common

Similar levels of importance were expressed in both types of settings for reasons for participating. Audiences found exploration-learning to be

quite important. In addition, high levels of importance were attached to getting information about the area, experiencing natural stimuli, learning about what to do in the area, and family/children orientation. Low importance was attached to introspection and affiliation out-group.

Similar levels of interest were expressed between the settings for types of information desired. High interest was attached to information on wildlife, geology, plants, and human history. Moderately high interest was expressed for information on management of National Forests, things to do, maps, weather, safety, ecology, and places to camp. In general, information associated with natural and cultural history topics has given highest preference over orientation types of information.

One of the most popular recreational activities among all Flaming Gorge visitors was auto driving for sightseeing. Other highly popular activities include camping, swimming, picnicking, fishing, and hiking. Less popular activities include trailbiking and motorcycling.

Like the two visitor centers, over 70 percent of the amphitheatre visitors expressed that they had never visited a presentation before. For those who had visited previously, the amount of visitation was dispersed evenly from one to over five times.

Among the socioeconomic descriptors of audiences at both types of settings, little variation occurred in age distribution or education. Amphitheatre audiences showed a slightly higher proportion of visitors who had only completed high school. Sex ratios between the Dam Visitor Center and amphitheatres were similar with approximately equal distributions of sexes at each setting, while the Red Canyon Visitor Center showed 14 percent more males than females. Visitor origins were similar across settings as well, with over three-fourths of the visitors originating from Utah.

Finally, several audience groups showed similar patterns in attaching levels of importance to the dimensions. Although out-group affiliation was substituted for utility-service in the amphitheatre study, the remaining four dimensions can be compared. Again, an audience type emerged that showed little or no interest in any of the dimensions. Likewise, another type could be found between settings that showed high interests in all of the dimensions.

Points of Difference

Among amphitheatre audiences, camping was the most popular recreational activity. This difference is easily accounted for, since all of the amphitheatres are located within walking distance of campgrounds. Higher levels of participation were also displayed in fishing, motorboating, river-rafting, and waterskiing, all of which tend to be more time-consuming of the activities listed.

Very few people came to the amphitheatre programs who were planning on spending one day or less. This difference can be attributed to the accessibility and the relative location of amphitheatres near campgrounds. The amphitheatres displayed the highest proportion of visitors who stayed longer than two days in the area.

Over 80 percent of the visitors at amphitheatres claimed Flaming Gorge as the primary destination of their trip. This proportion is high in comparison to the visitor centers, where only about half of the visitors made the same claim.

Among the socioeconomic descriptors, amphitheatre audiences showed the highest percentage of visitors over the age of 55 years old. A simple explanation for this difference can be found in the amount of leisure time available to people at ages near retirement. In addition, amphitheatre

audiences show a higher proportion of people with less than college-level educations.

The amphitheatre programs tended to attract larger group sizes than the visitor centers. This difference might occur due to the campground setting as a catalyst for social interaction, where small groups may combine and come to the amphitheatres in larger groups. A larger percentage of these groups brought children along than among groups at visitor center settings.

Amphitheatre audiences expressed particular interest in information on things to do in the area. This difference may well be understood due to the tendency of these people to stay longer in the area, and thus to have more time to engage in different activities.

Finally, the amphitheatre audiences attached little importance to affiliation with unknown people. More interest was shown for affiliation with known people. However, for both of these types of social interaction, the highest value amphitheatre audiences attached to either dimension was somewhat important (3.0 on a 6.0 scale).

Recommendations

The purpose of incorporating the amphitheatre settings into the study was to begin to build an information base for amphitheatre audience characteristics that would be useful in the design of VIS programs. In addition, although the style of presentations differs between amphitheatre and visitor center settings, a purpose of the study was to identify whether visitor center audiences and amphitheatre audiences within the same area differ significantly in their preferences. Some of the findings have pertinence to VIS programming, and a list of recommendations follows:

- (1) Amphitheatre audiences expressed a desire to experience natural stimuli, exploration-learning, to learn what to do in the area, and to get information about the area. Since over 90 percent of amphitheatre visitors stay longer than one day, VIS programming related to natural themes about the area as well as to how visitors can enjoy and experience the area would likely be useful to most amphitheatre participants.
- (2) Over 60 percent of the amphitheatre respondents attached high importance to amphitheatre experiences providing family/children orientation. Portions of VIS programs developed entirely for children would be well received by most amphitheatre participants.
- (3) The desire to meet new people was given relatively low values of importance among amphitheatre participants. Programs that encourage social interaction between groups of people would not be popular.
- (4) Amphitheatre programs designed to provide opportunities for introspection on reflective themes would not match the interest of a majority of amphitheatre visitors.
- (5) A variety of amphitheatre programs may be desired by visitors who spend more time in the area so that they may engage in an amphitheatre program more than once on the same trip to the area.

Additional Remarks

A basic objective of Visitor Information Services programming is to add to the enjoyment of National Forest visitors. Meeting this objective depends, in part, on the ability to identify the desires of people. This study was an attempt to identify the desires of people at both visitor centers and amphitheatre programs. It has two subpurposes: First, to identify characteristics of visitors across visitor center settings, and

determine if any similarities exist among visitor center audience preferences. Secondly, to identify visitor characteristics at the amphitheatre settings and determine if similarities exist between visitor center and amphitheatre audience preferences within the same area.

Several findings have pertinence to VIS programming. From them it can be seen that while visitor center audiences across geographic settings tend to have the same preferences, differences occur between the preferences of visitor center and amphitheatre audiences. Thus, VIS personnel should take into account that audience preferences vary more by interpretive setting rather than by geographic location.

Planners for VIS programming can effectively develop programs that meet audience desires by sampling audiences at the different interpretive settings. Once audience preferences are identified, the planner can allocate his program resources to accommodate visitor desires and, ultimately, to add to the enjoyment of National Forest visitors.

I. INTRODUCTION

The Problem

A basic objective of Visitor Information Service programming is to add to the enjoyment of National Forest visitors (FSM 1963, 1660.2). Meeting this objective depends, in part, on being able to identify the desires of people. For VIS audiences, such information has been lacking. It appears that VIS programs are prepared by VIS personnel based on what they want visitors to experience and their guesses about audience desires. Without data on visitor interpretive objectives, VIS personnel cannot evaluate whether or not their programming is aligned with visitor desires.

The Study

The purpose of the study was to identify characteristics of visitors at different interpretive settings within Flaming Gorge National Recreation Area in Utah and Cranberry Mountain of the Monongahela National Forest in West Virginia. Three settings were utilized at Flaming Gorge National Recreation Area: a visitor center having primary emphasis on visitor orientation, a visitor center having primary emphasis on natural history interpretation, and outdoor amphitheatres offering evening interpretive programs. In West Virginia, Cranberry Mountain Visitor Center was the only setting utilized. Its program objective included emphasis on visitor orientation as well as natural history interpretation.

Questionnaires were administered to samples of visitors at each of the various settings to determine (1) their reasons for consuming VIS programs, (2) their level of interest in different types of information, and (3) their socioeconomic profiles.

This report presents results of the study. The remainder of Section I describes the study settings at Flaming Gorge National Recreation Area and Cranberry Mountain Visitor Center. Section II outlines the study design. Section III reports the results in which audience profiles for each study area and the various interpretive settings are developed. It identifies pervasive interpretive-related interests and maps the socioeconomic diversity by identifying subgroups that differ in their reasons for consuming VIS programs. In addition, Section III reports the results of exploratory attempts to find linkages between reasons for consuming, information-related interests, and socioeconomic profiles for each setting. Section IV discusses the visitor center results with a comparison of the two study areas.

The Study Areas

Flaming Gorge National Recreation Area

Flaming Gorge National Recreation Area, located in northeast Utah and southwest Wyoming (Figure 1), offers a wide array of VIS programs, each of which receives relatively high levels of use. From the standpoint of cost effectiveness, these qualities provided for an ideal study environment.

Included in the programs are two visitor centers from which samples were drawn. One of these, Red Canyon Visitor Center, is situated seven miles off of major thoroughfares at the rim of the large Flaming Gorge Canyon. It features an interpretive naturalist, a panoramic view, an auditorium for recorded audio-visual programs, interpretive literature for sale, and several exhibits on the local flora, fauna, geology, and history of the area. Average attendance during the summer season is approximately 300 visitors per day.

The other setting, Dam Visitor Center, is situated on a major thoroughfare at the top of Flaming Gorge Reservoir Dam. It features an interpretive

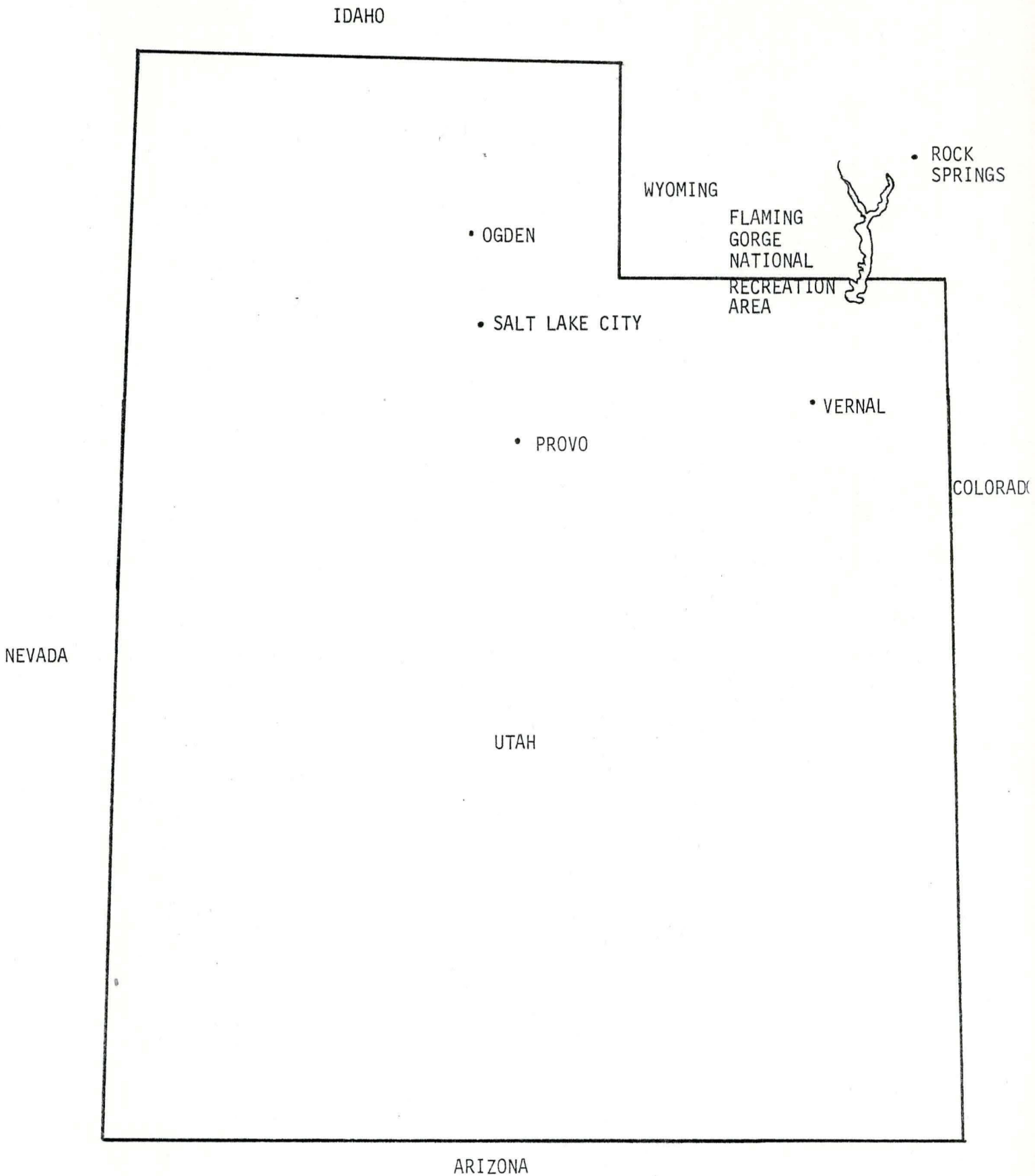


Figure 1. Location of Flaming Gorge National Recreation Area, Utah.

naturalist, interpretive literature for sale, and exhibits dealing with orientation and history of the area, with particular emphasis on dam construction. Average attendance is approximately 600 persons per day. VIS programmers at Flaming Gorge tend to regard the Dam Visitor Center as facilitating orientation, while the Red Canyon Visitor Center is seen to facilitate natural history interpretation.

The third interpretive setting used in the Flaming Gorge study was the outdoor amphitheatres. Samples were drawn from three of the five locales where programs were offered during 1975. Each was within walking distance of a forest campground, and a large proportion of visitors came from that setting. Sampling at amphitheatre programs was associated with visitors from Bootleg, Lucerne, and Mustang campgrounds.

In these outdoor settings, interpretive naturalists presented narratives of approximately 45 minutes duration, keyed to a photographic slide presentation. Topics varied by program; some dealt with forest management, while others focused on the geology, flora, fauna, and ecology of the area. On the average, approximately 80 visitors were in attendance at each program.

Cranberry Mountain Visitor Center

Cranberry Mountain Visitor Center is located among the hardwoods of the Monongahela National Forest in West Virginia, 200 miles east of Charleston, W. V. (Figure 2). The Center serves as the focal point for visitor information services on the Forest, and provides for both visitor orientation and natural history interpretive programs. It features an interpretive naturalist, interpretive literature, and an array of exhibits illustrating the local flora, fauna, geology, and history of the area. In addition, a series of displays explain the multiple-use concept of forest management employed by the Forest Service.

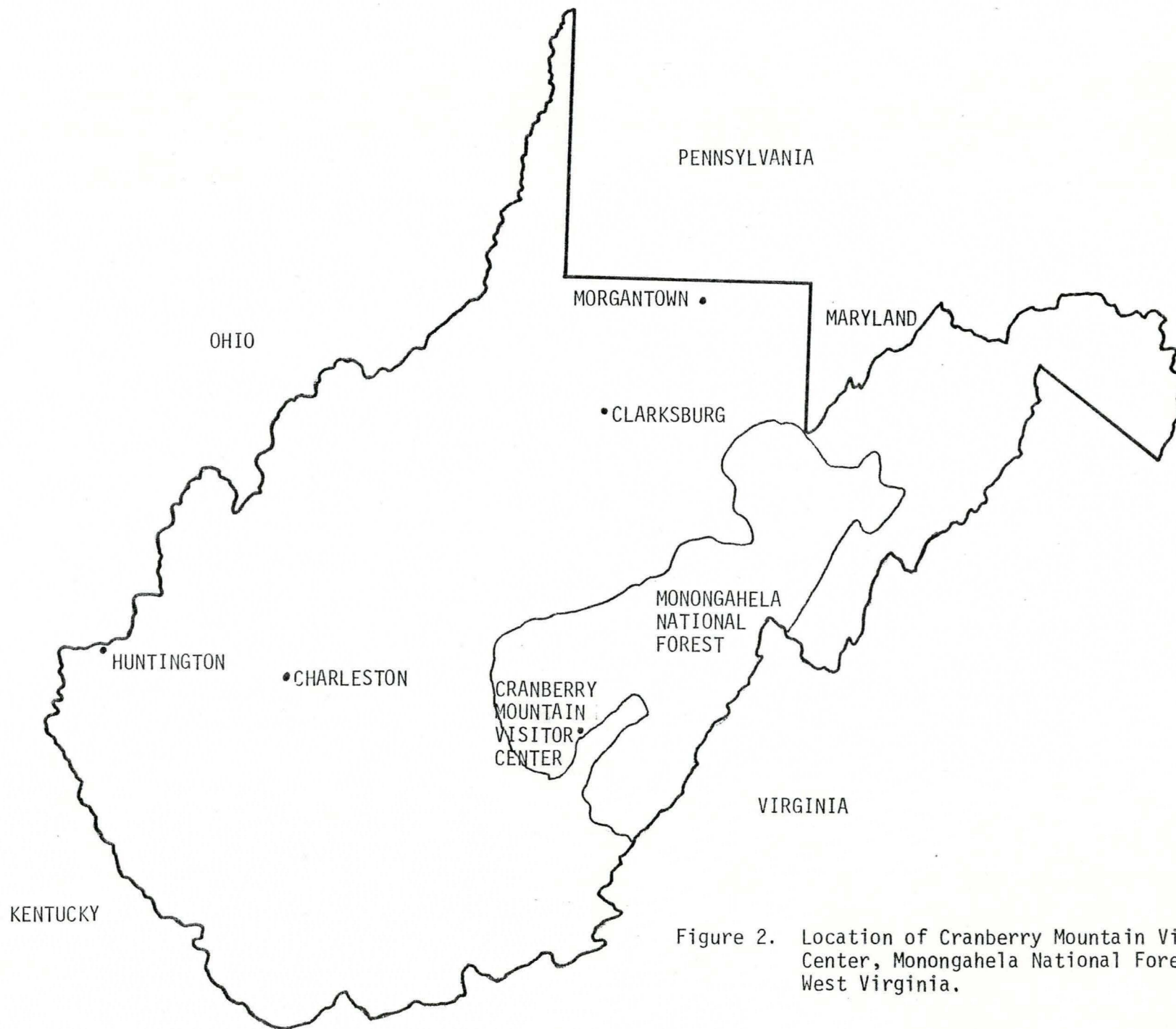


Figure 2. Location of Cranberry Mountain Visitor Center, Monongahela National Forest, West Virginia.

The Visitor Center is located within close proximity of several outstanding natural resource features. The Cranberry Backcountry Area is located three miles to the northeast of the Center and is popular for both its scenic drives and camping areas. The Falls of Hill Creek Scenic Area features three waterfalls dropping over 65 feet along a short stretch of Hills Creek. Perhaps the most unique resource is the Cranberry Glades Botanical Area, which serves as an outdoor classroom for visitors, botanists, and naturalists. The Glades are located three miles from the Visitor Center and contain a variety of northern plant species unique to the tundra regions of Alaska. The Center actively makes use of the Glades in interpretive programs.

Average attendance over the summer season is approximately 200 visitors per day.

II. METHODS

Two steps were employed to gain the desired results from the study areas. The first step included collecting data from each setting within the study areas. The data were then analyzed so that they could be meaningfully interpreted for VIS programming purposes.

Data Collection

Two different types of program settings were used in the study areas to obtain data. These included the visitor centers at both Flaming Gorge and Cranberry Mountain, and the outdoor amphitheatres at Flaming Gorge.

Visitor Centers

Data were collected from Red Canyon Visitor Center and Dam Visitor Center at Flaming Gorge National Recreation Area in 1975 and at the Cranberry Mountain Visitor Center in West Virginia in 1976.

Questionnaire

The questionnaire used is shown in Appendix A. It was organized into three parts, each dealing with a different type of information. First, the questionnaire dealt with identifying the reasons why respondents decided to visit the interpretive setting at which they were sampled (Question Q1). Then, a series of questions solicited information on general aspects of the respondents' recreational interests which are relevant to VIS programming (Questions Q2-Q6). Finally, questions Q7 through Q12 were included to collect information on a range of socioeconomic descriptors.

Sampling

Analysis needs for Flaming Gorge National Recreation Area dictated that approximately 300 samples be collected for each of the two visitor centers.¹ Visitation was sampled from the period of July 1, 1975 to September 3, 1975.

Based on concerns for cost-effectiveness, samples were clustered by days of the week. Ten interview days were scheduled at each of the visitor centers in Flaming Gorge. They were randomly chosen from the sampling period. On an interview day, visitors were sampled at a rate of one-in-five of those over age 17 at the Red Canyon Center, and a rate of one-in-ten of those over age 17 at the Dam Center.²

For the Cranberry Mountain Study, analysis needs required that approximately 600 samples be collected (300 summer, 300 fall). Visitors were sampled from the period of June 9, 1976 to October 24, 1976. Thirty interview days were scheduled in the Cranberry study.³

Administration

The questionnaires were distributed by one trained interviewer devoting full attention to the sampling process in each of the study settings.

At the visitor centers, the interviewer provided each visitor sampled with a personal introduction, followed by a brief explanation of the nature and purpose of the study, the type of information required, and the format

¹Sample sizes were judged to be the minimum acceptable for the anticipated use of specific cluster analysis techniques (Section III).

²Sampling plans for the visitor centers were dictated by the need for 300 samples from each setting at Flaming Gorge. The average visitation rate in the Red Canyon and Dam visitor centers was estimated at 300 and 600 visitors per day, respectively. Assuming 50 percent of the visitors met the age criterion, for 10 interview days, a sampling rate of 1/5 was judged necessary for the Red Canyon Center, while a sampling rate of 1/10 was required at the Dam Center.

³The sampling rate was 1/5 visitors meeting the age criterion (assumed to be 50 percent).

for obtaining this information. The provisions for complete confidentiality were emphasized. Then, the visitor was requested to complete the questionnaire.

In cases where individuals were reluctant to participate, some effort was made to encourage their participation. However, if mild efforts were met with continued resistance, the individual was dropped from the sample.

The number of visitors sampled at each visitor center and their rates of response are summarized in Table 1. As the table indicates, less than 5 percent of the sample refused to participate in the study.

Table 1. Number of visitors sampled and rates of response.

Interpretive Setting	Total Sample	Completed Questionnaires	Percent Response
FLAMING GORGE NATIONAL RECREATION AREA			
Red Canyon Visitor Center Emphasis: Natural History Interpretation	360	341	95
Dam Visitor Center Emphasis: Orientation	362	342	95
Amphitheatres			
Bootleg Campground		113	
Lucerne Campground		109	
Mustang Campground		127	
CRANBERRY MOUNTAIN VISITOR CENTER	632	606	96

Amphitheatres

All amphitheatre data were collected in the Flaming Gorge National Recreation Area. The three amphitheatres sampled were within walking distance of the Bootleg, Lucerne, and Mustang campgrounds.

Questionnaire

The questionnaire used in the amphitheatre settings was the same as that used in the Visitor Centers (Appendix A). A few minor modifications were made in the format to facilitate its administration in the amphitheatre setting.

Sampling

Analysis needs dictated that approximately 300 samples be collected in total from the amphitheatre settings. Samples were clustered by days of programming. Nine interview days were randomly selected, three at each amphitheatre. For these audiences, all persons over the age of 17 were sampled.⁴ The number of completed questionnaires is included in Table 1.

Administration

For amphitheatre sampling, the same procedure was followed as that used in visitor center sampling, but directed to visitors en masse at the scheduled starting time of the program. Programs were delayed fifteen minutes to facilitate questionnaire completion. Visitors arriving late were not requested to participate.

Analysis

Descriptive statistics of audience profiles were developed on the frequencies subprogram of the Statistical Package for Social Sciences (Nie, et al, 1975). The SPSS computer package contains a set of integrated programs designed to meet the analytical needs for social science data. Socioeconomic descriptions were generated from questions Q7 through Q12 on the questionnaire.

⁴The sampling plan for the amphitheatre condition was based on the need for 300 samples. The average visitation rate to the three amphitheatre settings was approximately 80 visitors per program during the summer session. Assuming 50 percent of the visitors met the age criterion, nine days of sampling would have ensured the necessary 300 samples.

They included responses pertaining to the age, sex, education, group size, children present, and home zip code information of VIS audiences.

Further analysis broke the data down into the dimensions of interpretive experiences and the types of visitors consuming interpretive services based on their reactions to the different dimensions.

The first step in this process was an attempt to identify the dimensions of interpretive experiences that provided satisfaction. Responses from question Q1 on the questionnaire were subjected to cluster analysis (Tryon and Bailey, 1970). Cluster analysis enables an empirical identification of those items which fit together mathematically due to consistent scoring by respondents. Scores on all items by each respondent were correlated and items were grouped by their mathematical relationships. The groupings, or dimensions, should have common content, to which the researcher can assign a content theme or cluster name.

After all the clusters were identified, five were selected because they were either the highest valued dimensions or they were responded to with considerable variation and would thus be useful for discriminating among visitors. The analysis system then used the dimensions to "type" the VIS audience sampled. "Typing" refers to grouping people who relate to the dimensions in a similar way. For instance, if there are three dimensions and four individuals who relate favorably to all three dimensions, these four individuals would be grouped. If three other individuals relate to the dimensions unfavorably, they would also be grouped, but not with the first four individuals. Two types (or groups) would be formed. Thus, in the study, respondents within each type related similarly to all the dimensions while respondents in different types had different relationships to the dimensions.

After types of visitors were formed, further analysis was conducted by forecasting other visitor characteristics for the types (Tryon and Bailey, 1970). This was done to further enable descriptions of these audience groups. Descriptive characteristics included visitor information desires, recreational activities engaged in (Cranberry sample excluded), and various socioeconomic parameters.

III. RESULTS

The results from the two study areas are reported separately and according to the interpretive setting. Within each setting the results are divided into two subsections. The first subsection develops composite profiles of VIS audiences, identifying reasons for consuming, information interests, and the various socioeconomic descriptors. This subsection is important for preliminary understanding of audience profiles. The second subsection addresses audience diversity, where audience groups are identified. It reports group differences in information interests, activities engaged in, and socioeconomic profiles. This section also serves to provide audience segmentation so that the visitors are more definitively described than if population averages were given.

Flaming Gorge National Recreation Area

Visitor Centers

Composite Audience Profiles

Reasons for Participating

In the analysis of Q1 items, several clusters were identified. Mean scores for the clusters are shown in Table 2.⁵ Responses range from a possible 6.0, representing Extremely Important, to 1.0, representing Not Important (see Question Q1, Appendix A). Also shown are mean scores to three separate Q1 items which failed to cluster with other items but

⁵Items having an average Pearson product-moment of 0.4 or higher and an Alpha reliability of 0.6 or higher were included in the clusters.

Table 2. Reasons for participating in VIS programs at Flaming Gorge National Recreation Area--visitor centers.

Reason ^a	-----MEAN VALUE ^b -----	
	Dam Visitor Center (Orientation) ^c	Red Canyon Visitor Center (Natural History Interpretation) ^d
Look at Exhibits	4.7	5.0
Experience Natural Stimuli	4.5	4.8
Get Information About Area	4.0	4.3
Exploration/Learning	3.9	4.1
Learn What To Do In Area	3.6	3.8
Family/Children Orientation	3.4	3.5
Affiliation Within Group	3.0	3.1
Utility-Service	2.3	2.3
Introspection	2.1	2.3
Exercise	2.1	2.1
Affiliation-Outgroup	1.9	1.9
Lack of Something Better	1.7	1.5

^aReasons are more specifically identified in Table 14, except for the following: Look at Exhibits, Get Information About the Area, and Learn What to Do in Area, which refer to Q1, items 41, 7, and 19, respectively. Also, Exercise was derived from items 12 and 18; Affiliation-Outgroup was derived from items 10, 17, and 28; Lack of Something Better was derived from items 23 and 32; and Experience Natural Stimuli was derived from items 5 and 15 (see Q1, Appendix A).

^bScore range: 1-6, where a 1 represents Not Important and a 6 represents Extremely Important (see Q1, Appendix A).

^cDam Visitor Center is commonly perceived by VIS personnel to serve a visitor orientation function.

^dRed Canyon Visitor Center is commonly perceived by VIS personnel to serve a natural history interpretation function.

nonetheless may be of interest in developing a profile of reasons for participating. They are:

To get information about the area,

To learn what there is to do in the area,

To look at the exhibits here.

What is striking about the pattern of data in Table 2 is the similarity of visitors between the two visitor centers. This has important implications for VIS personnel who frequently attribute different motives and interests for visitation at the different settings. It appears that the discrepancy in visitation rates between the two centers⁶ is more a reflection of accessibility than of a difference in service function to the forest visitor (the Dam Visitor Center has an orientation emphasis and Red Canyon Visitor Center has a natural history emphasis).

For the visitor centers, the chance to look at exhibits was given the highest importance rating among the reasons for visiting. Alternatively, the utility-service function (using restrooms, getting drink of water, etc.) was among the lowest. Thus, it can be inferred that forest visitors attached more value to the interpretive experience and less value to the utility-service function of the visitor centers.

For the two visitor centers, reasons for participating centering on the need to explore, learn, and gain information rated particularly high, again reflecting the utility of VIS interpretive efforts. The high level of importance placed on the desire to experience natural stimuli suggests that visitors would attach particular value to interpretive/educational programs focusing on a natural environment theme.

⁶The Dam Visitor Center receives roughly twice as much visitation as the Red Canyon Visitor Center.

Orientation toward the family and providing learning experiences for children rated moderately important. Analyses presented later indicate that when respondents without children are omitted from consideration, greater importance is attached to this reason for visiting (see Table 15). At the sites sampled in Flaming Gorge, present interpretation specifically designed for children is minimal. Table 2 suggests that adults, as well as children, would find value if portions of the interpretive experience were structured entirely for children.

The desire to introspect was given relatively low importance as a reason for participating. The data indicate that in Flaming Gorge interpretive programs developed with an introspective or reflective theme would not be as well received as programs developed around an educational theme.

Information Interests

In question Q2 of the questionnaire, respondents were asked to rate their degree of interest in the selected types of information which could be made available at the interpretive settings. Table 3 lists mean scores for each Q2 item (Appendix A), where 6 represents Extremely Interested and 1 represents Not Interested.

Again, a basic similarity in profiles among respondents at the two visitor centers is apparent. Although Red Canyon visitors exhibited somewhat higher levels of interest in each category of information, rankings of preference for the different types were nearly the same.

For both interpretive settings, highest preference was expressed for information relating to natural and cultural history interpretation (wildlife, geology, human history, and plants). Information dealing with general ecology was given relatively high interest. Visitors also expressed relatively strong interest in orientation information (e.g., things to do in area, maps

Table 3. Degree of interest in selected types of information for visitors to visitor centers at Flaming Gorge.

Type of Information ^a	-----MEAN VALUE ^b -----	
	Dam Visitor Center (Orientation) ^c	Red Canyon Visitor Center (Natural History Interpretation) ^d
Wildlife	4.9	5.1
Geology	4.8	4.9
Human History	4.5	4.8
Plants	4.4	4.8
General Ecology	3.8	4.1
Things To Do In Area	3.8	4.3
Maps of the Region	3.7	3.9
Management of National Forest Lands	3.6	3.7
Places to Camp	3.2	3.3
Weather	3.0	3.4
Distances	3.0	3.2
Safety	2.9	3.3
Overnight Accommodations Other Than Camping	2.4	2.5

^aFrom Q2, Appendix A.

^bScore Range: 1-6, where a 1 represents Not Interested and a 6 represents Extremely Interested (see Q2, Appendix A).

^cDam Visitor Center is commonly perceived by VIS personnel to serve a visitor orientation function.

^dRed Canyon Visitor Center is commonly perceived by VIS personnel to serve a natural history function.

of the region). It is important to note that interest was higher in information dealing with natural history than orientation information, even at the Dam Visitor Center.

Visitors also expressed moderately strong interest for information on management of National Forest lands, a topic which often receives emphasis in VIS programming. This documents the forest visitor's potential receptivity for messages intended to increase public awareness and/or understanding of forest management objectives.

Question Q3 identified the range of recreational activities pursued by the respondent during his trip to the area (Table 4). Auto driving for sightseeing, camping, hiking or walking on trails, picnicking, and fishing were highly popular activities. It is likely that interpretive messages presented within the context of these activities would be well received by many visitors. The other activities listed were pursued much less frequently, and interpretive messages directed toward participants in these activities likely would have less appeal.

Question Q4 asked respondents the extent to which they had previously visited the interpretive setting at which they were sampled. Table 5 shows that nearly one out of every four visitors had visited the setting previously, underscoring the need for varying interpretive programs.

Question Q5 and Q6 asked about the type of trip in which the respondent was engaged, so that VIS program consumption could be evaluated within the context of a total trip or experience. Tables 6 and 7 present the response to these questions. Table 6 indicates that nearly one-half of the visitors to the Dam Visitor Center spent one day or less at Flaming Gorge while visitors to the Red Canyon Visitor Center stayed much longer in the area. One inference from this is that exhibits and programs at Red Canyon can be more detailed since visitors tend to be more familiar with features of the area

Table 4. Proportion of visitors to the visitor centers engaging in selected recreational activities at Flaming Gorge.

Activities	-----PERCENT-----	
	Dam Visitor Center (Orientation) ^a	Red Canyon Visitor Center (Natural History Interpretation) ^b
Camping	57	68
Swimming	26	30
Picnicking	43	51
Hiking or Walking on Trails	46	68
Trailbiking	4	4
Motorcycling	6	4
Fishing	40	42
Rock-collecting	20	27
Motorboating	22	20
Auto Driving for Sightseeing	69	83
River Rafting	15	15
Water Skiing	13	11

^aDam Visitor Center is commonly perceived by VIS personnel to serve a visitor orientation function.

^bRed Canyon Visitor Center is commonly perceived by VIS personnel to serve a natural history interpretation function.

Table 5. Degree of previous visitation to Flaming Gorge visitor centers.

Degree of Visitation	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
Never Before	70	73
One Time	5	4
Two	8	9
Three	4	4
Four	3	2
Five	2	-
Over Five	9	8

Table 6. Number of days visitor center respondents spent at Flaming Gorge National Recreation Area.

Number of Days	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
One Day or Less	47	36
Two	21	25
Three	16	16
Four	9	7
Five	4	4
Over Five	5	11

Table 7. Trip destinations of visitors at Flaming Gorge visitor centers.

Destination	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
Flaming Gorge National Recreation Area	48	51
Passing Through on Way to Somewhere Else	52	49

and may have more time to spend at the Center. Finally, Table 7 indicates that one-half of the respondents at the visitor centers had Flaming Gorge as the primary destination of their trip.

Socioeconomic Descriptors

Tables 8 and 9 present the age and education structure of the respondents. They attest to the diversity of Flaming Gorge VIS audiences in socioeconomic composition, and underscore the need for interpretation at different levels of complexity. Over one-third of the audiences at both visitor centers had no college-level education.

Table 10 shows that males and females (over the age of 17) were about equally represented as visitors to the Dam Visitor Center. A higher proportion of males were represented in visitation to Red Canyon, accounting for 57 percent of the respondents.

Visitors came to the visitor centers in a diversity of groups. Table 11 shows that over 25 percent of the visitors to Red Canyon Visitor Center came in groups of six or more members. Table 12 shows that one-half of the visitors to the centers brought children with them.

The origin of the visitors, by state, is shown in Table 13. Over three-fourths of the visitors to the visitor centers resided in the western states. Approximately 40 percent of the visitation was from Utah, mostly originating from the Wasatch Front area in the northern part of the state.

Audience Diversity

Types of Audience Members

Five dimensions from the Q1 items (Table 14) were used in typing visitor center respondents. Respondents were typed based on similarity in response to the following dimensions: (1) Introspection, (2) Affiliation, within-group, (3) Family-children orientation, (4) Exploration/learning, and (5) Utility-service.

Table 8. Age distribution of visitors at Flaming Gorge visitor centers.

Age	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
18 - 24	10	11
25 - 34	27	22
35 - 44	22	24
45 - 54	19	25
55 - 64	17	14
Over 65	6	4

Table 9. Educational distribution of visitors at Flaming Gorge visitor centers.

Highest Grade Completed	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
Grade		
8	1	2
9	1	1
10	2	2
11	2	2
12	32	30
College		
1	7	6
2	10	11
3	7	9
4	14	15
5 and over	24	24

Table 10. Proportion of males and females visiting the Flaming Gorge visitor centers.

Sex	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
Female	49	43
Male	51	57

Table 11. Size of groups visiting the Flaming Gorge visitor centers.

Group Size	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
Self Only	2	2
2	35	33
3 - 5	45	40
6 - 10	14	21
11 - 15	4	2
16 - 21	0	1
Over 21	0	1

Table 12. Proportion of adult visitors who brought children with them to Flaming Gorge visitor centers.

Brought Children	-----PERCENT-----	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
No	50	50
Yes	50	50

Table 13. Residential origins for the sample of visitors at the Flaming Gorge visitor centers.

State	NUMBER (PERCENT)	
	Dam Visitor Center (Orientation)	Red Canyon Visitor Center (Natural History Interpretation)
<u>Northeast:</u>		
Connecticut	2 (a)	
Delaware		1 (a)
Maryland	1 (a)	1 (a)
Massachusetts	2 (a)	
New Jersey		2 (a)
New York	2 (a)	5 (1)
Pennsylvania	1 (a)	5 (1)
Vermont	1 (a)	
Washington, D.C.		1 (a)
	9 (3)	15 (4)
<u>Southeast:</u>		
Florida	2 (a)	3 (a)
Georgia	3 (a)	
Kentucky	1 (a)	
Tennessee	1 (a)	2 (a)
Virginia	1 (a)	2 (a)
	8 (2)	7 (2)
<u>Upper Midwest:</u>		
Illinois	9 (3)	15 (4)
Indiana		1 (a)
Iowa	4 (1)	2 (a)
Kansas	2 (1)	5 (1)
Michigan	6 (2)	6 (2)
Minnesota	1 (a)	4 (1)
Nebraska	4 (1)	2 (a)
North Dakota	1 (a)	
Ohio	4 (1)	3 (a)
South Dakota		1 (a)
Wisconsin		5 (1)
	31 (10)	44 (13)
<u>Mid-South:</u>		
Arkansas		2 (a)
Louisiana	1 (a)	
Missouri	5 (2)	7 (2)
Oklahoma	5 (2)	1 (a)
Texas	11 (3)	6 (2)
	22 (7)	16 (5)
<u>West:</u>		
Arizona	7 (2)	9 (3)
California	30 (9)	58 (18)
Colorado	65 (20)	32 (10)
Idaho	3 (a)	5 (1)
Montana	1 (a)	1 (a)
New Mexico	4 (1)	2 (a)
Nevada	1 (a)	3 (a)
Oregon	3 (a)	8 (2)
Utah	131 (40)	128 (38)
Wyoming	12 (4)	6 (2)
Washington	2 (a)	3 (a)
	259 (78)	255 (76)
TOTALS	329 (100)	337 (100)

^aLess than 1 percent.

Table 14. Flaming Gorge visitor centers groupings of Q1 (reasons for participating) items as identified by cluster analysis.

Introspection

- To think about who I am
- To help me understand what life is all about
- To think about my personal values

Affiliation Within-Group

- I thought I would like the company of the people who came with me
- To be with people who are enjoying themselves
- So I could do something with my companions

Family/Children Orientation

- I thought it would be a good experience for the family
- So my children could learn things here
- So the family could do something together
- To teach my children about things here

Exploration-Learning

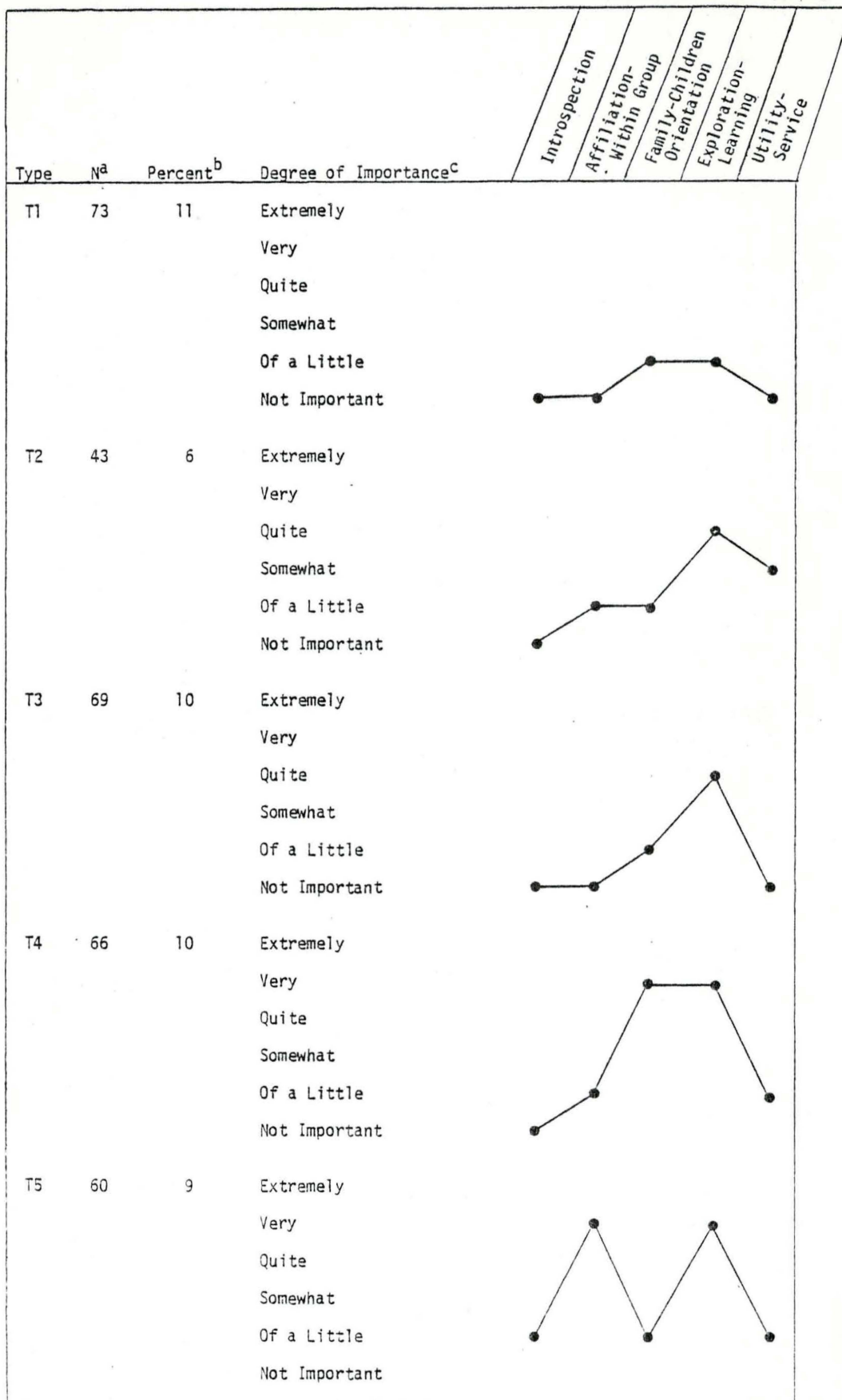
- To find out about things
- Because of the sense of discovery here
- To explore things
- So I could learn something new
- To increase my knowledge

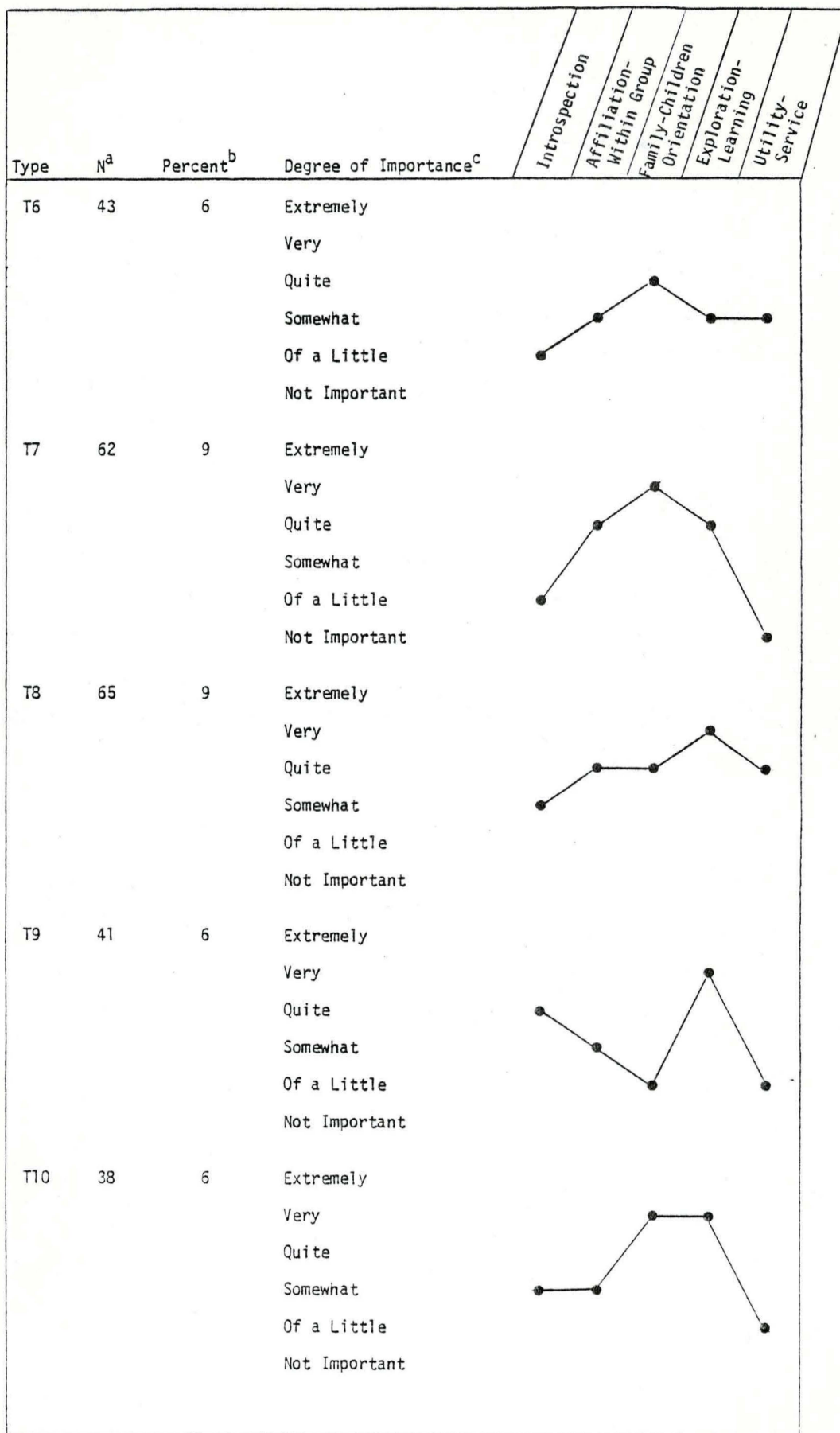
Utility-Service

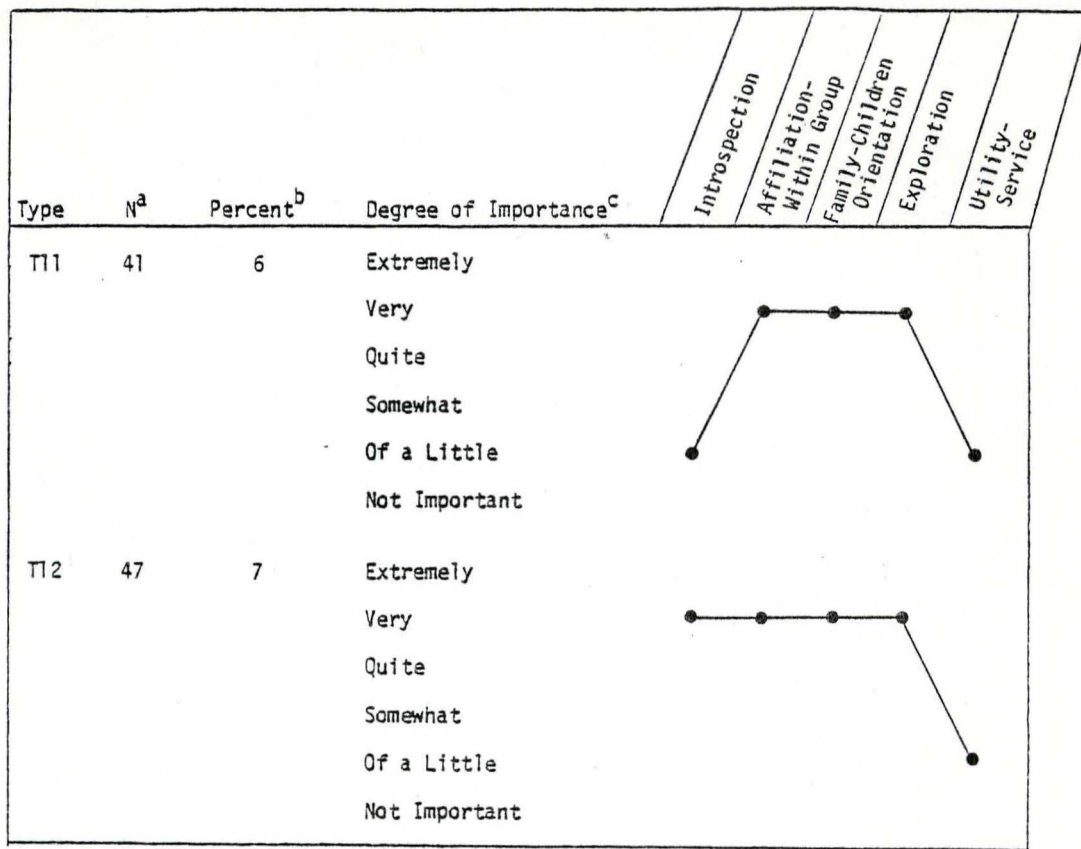
- To obtain a map of the area
 - To use restroom facilities
 - To get a drink of water
 - To see where I can find a place to stay overnight
 - For a break from driving
-

In this analysis, data from both visitor centers were combined because of the audiences basic similarity in composite reasons for participating (Table 2). In the visitor center population, 12 types of visitors were found. A graphic representation of the types is in Figure 3. The types are plotted to portray the degree of importance of each of the reasons for participation (dimensions) for the visitors. The figure also shows the proportion of the population which is described by each type. Note that all but 35 visitors (5 percent) are included in one of the twelve groups.

Reasons for Participating^d







^aThere were 683 cases used in cluster analysis.

^bThere are 35 unique individuals, or 5 percent of the total sample, that were not grouped into types.

^cThe adjectives correspond to the 6.0 scale used, where 1.0 represents Not Important and 6.0 represents Extremely Important.

^dThe items from which the dimensions were derived are shown in Table 14.

Figure 3. Graphic representation of visitor groups based upon reasons for participation in visitor center programs at Flaming Gorge.

A brief description of each type may be helpful. Type 1 attaches little or no importance to any of the five reasons for participating. It appears that there may be little that can be done with VIS programming to meet their desires, and they look like potential dropouts from programming participation. Eleven percent of the population is described by the Type 1 profile.

Type 2 is motivated by exploration and learning opportunities and somewhat for utility-service functions. Type 3 finds exploration-learning quite important, but has little or no interest in the other reasons. Type 4 is also very interested in exploration, but unlike Type 3 shows a strong interest in providing a good experience for the family and children as well. Type 5 has strong interest in being with others (affiliation within-group) and exploration-learning opportunities. Type 6 has strong interest in providing a good experience for the family and children and also finds value in utility-service functions, being with others, and opportunities for exploration-learning. Type 7 shows moderate interest in affiliation and exploration, but particular interest is focused on the family. Type 8 has moderate interest in all the dimensions, especially opportunities for exploration and learning. Of all the groups, Type 8 attaches the greatest interest to the utility-service functions of the centers. Type 9 expresses very strong interest in exploration and has moderately strong interest in introspection. Type 10 has very strong interest in family/children orientation and exploration opportunities, while showing some interest in introspection and affiliation as well. Type 11 finds affiliation with others, family orientation, and exploration to be very important reasons for coming to the visitor centers. Finally, Type 12 expressed strong interest in all reasons, except utility-service functions.

This group, comprising 7 percent of the total population, could possibly contain the most enthusiastic receiver of a variety of interpretive exhibits.

For 78 percent of the respondents (all types except 1 and 6), moderate to strong importance was attached to the visitor centers for providing opportunities for exploration and learning. On the other hand, only 9 percent of the population is included in types who find the utility-service opportunities as quite important (4.0 on a 6-point scale, Type 8). Only 21 percent found the utility-service function as somewhat important (3.0 on a 6-point scale; Types 2, 6, and 8). These data again support the thought that the majority of visitor center users are attracted to the centers because of the opportunities they provide for learning and exploration rather than for the utility-services they might provide.

Only 28 percent of the population is comprised of types viewing introspection as somewhat important or more (3.0 on a 6-point scale, Types 8, 9, 10, and 12), and only members of Type 12 (7 percent of the population) viewed introspection as very important (5.0 on a 6-point scale).

Orientation toward family and children was typically ranked either high (Types 4, 6, 7, 8, 10, 11, and 12) or low (Types 1, 2, 3, 5, and 9). Over 53 percent of the respondents found family/children orientation at least quite important (4.0 on a 6-point scale), while 42 percent found it only of little importance (2.0 on a 6-point scale).

Finally, 37 percent of the population were in types which attached little or no importance to affiliation with known friends as a reason for visiting the centers (Types 1, 2, 3, and 4). However, 40 percent were in types which saw this reason as quite important (4.0 on a 6-point scale, Types 5, 7, 8, 11, and 12). Such data attest to the diversity of reasons for participating at visitor center settings.

Variables Related to Audience Types

The final step in analysis was to determine if respondents who belong to different types shown in Figure 3 differ in information interests, patterns of recreation behavior while at Flaming Gorge, and in socioeconomic profiles. The results are shown in Table 15. In addition, Table 16 is a verbal summary of the results.

In interpreting Table 15, the left part of the table is an abbreviated form of Figure 3. The right part of Table 15 shows how the types relate to the variables (response to items Q2-Q6, Q8-Q12). The table can be evaluated by reading along the rows for a description of type characteristics or by reading down the columns for a contrasting view among the types as they relate to each variable.

For example, it can be seen that Type 1, in relation to other audience groups, expressed low to moderate interest in all categories of information listed, tended not to participate in swimming, picnicking, hiking, rock-collecting, and sightseeing, tended to come to the visitor center in groups of 3 to 5 people, tended not to have children along the trip, had some college education, and were usually between ages 45 and 54 years old. Type 2 had moderate interest in maps of the region, distances to other recreation areas and cities, and other types of information on plants, human history, and management of the area. They tended to spend two days at Flaming Gorge and indicated that Flaming Gorge was not their trip destination. They tended to not engage in many of the popular activities at Flaming Gorge which probably reflects the short and transient nature of their visit.

From examining the individual variables, it can be seen that the presence of children helped to distinguish the audience groups from one another. Groups typically had children along (corresponding to a value of 2.0) or they did not (corresponding to a value of 1.0). Other variables such as group size and destination served to distinguish types from one another as well.

Table 15. Flaming Gorge visitor center audience types and variable correlations, with types on the left and type means significantly different ($\alpha \leq .05$) from the population mean on the right.

TYPES						INFORMATION WANTS												ACTIVITIES ENGAGED IN ^a												OTHER									
Type Number	Introspection	Affiliation-Within Group		Family-Children Orientation	Exploration-Learning	Utility-Service	Geology	Wildlife	Plants	Human History	Management	Ecology	Place to Camp	Place to Stay Overnight	Maps	Weather	Things to Do in Area	Distance	Safety	Camp	Swim	Picnic	Hike	Trailbike	Motorcycle	Fish	Rock-collecting	Motorboat	Sightseeing	Raft	Waterski	Days Will Stay	Destination ^b	Group Size ^c	Children Along ^d	School Completed ^e	Sex ^f	Age ^g	
T1	1	1	2	2	1		3.8	3.9	3.5	3.8	2.0	2.2	2.4	1.4	2.7	2.0	3.1	1.8	1.6		L	L	L				L		L						2.5	1.3	14		3.7
T2	1	2	2	4	3				4.2	4.2	3.2				4.4			3.5		L	L	L		L	L	L		L			L	1.8	1.7	2.3	1.1				
T3	1	1	2	4	1		4.6	4.6	4.3	3.9	2.9	3.7	2.4	1.9	3.1	2.4	3.2	2.3	2.0	L	L	L	L			L	L	L		L	L	1.8	1.8	2.4	1.2	15		3.7	
T4	1	2	5	5	2		5.2	5.4				4.5					4.3			H	H		H			H								3.2	1.9				
T5	2	5	2	5	2															L	L			H		L		L				2.0		2.6	1.1				
T6	2	3	4	3	3		4.2	4.5	4.1	4.0		3.0				2.7	3.6	2.5		H						H							1.3	3.3	1.7		1.3	2.8	
T7	2	4	5	4	1										3.7	2.8	3.6			H						H		H		H		2.7	1.4	3.5	1.8		3.0		
T8	3	4	4	5	4			5.4	4.8	5.1	4.4	4.4	4.5	3.4	5.0	4.4	5.0	4.3	4.2	H	H	H				H	H			H		2.7	1.3		1.6		2.9		
T9	4	3	2	5	2		5.3		5.1	5.2	4.2	5.0							3.6					L	L		L		L	L	1.7	1.7	2.0	1.1		1.3			
T10	3	3	5	5	2		5.3	5.4	4.9	5.1	4.4	4.8						3.8	4.2		H	H					H	H	H		H		1.4	3.5	1.9	13			
T11	2	5	5	5	2		5.2	5.4		5.1							4.5					H				H				H			1.4	3.4	1.9				
T12	5	5	5	5	2		5.4	5.5	5.4	5.6	4.9	4.8	3.7	3.6		4.0	4.5	4.0	4.7					H	L	H		H				3.1	1.3			13			
\bar{x}	2.3	3.2	3.6	4.3	2.1		4.9	5.0	4.6	4.7	3.7	3.9	3.3	2.5	3.8	3.2	4.0	3.1	3.1	63%	28%	47%	53%	4%	5%	41%	23%	21%	76%	15%	12%	2.3	1.5	2.9	1.5	14	1.5	3.2	

1 - Not Important
2 - Of a Little Importance
3 - Somewhat Important
4 - Quite Important
5 - Very Important
6 - Extremely Important

^aLetters represent whether type was significantly lower (L) or higher (H) than mean of population for participation in an activity ($\alpha \leq 0.05$).

^bAnswers coded 1 (Flaming Gorge is trip destination) and 2 (elsewhere). (See question Q6, Appendix A.)

^cAnswers coded 1 (self), 2 (2), 3 (3-5), 4 (6-10), 5 (11-15), 6 (16-21) and 7 (over 21). (See question Q8, Appendix A.)

^dAnswers coded 1 (No children along) and 2 (Children along). (See question Q9, Appendix A.)

^eAnswers coded by year of school completed (e.g., 13 represents one year college, and 17 represents greater than 4 years in college). (See question Q10, Appendix A.)

^fAnswers coded 1 (Male) and 2 (Female). (See question Q11, Appendix A.)

^gAnswers coded 1 (18-24), 2 (25-34), 3 (35-44), 4 (45-54), 5 (55-64), and 6 (65 and over). (See question Q12, Appendix A.)

Table 16. Audience types and their characteristics for Flaming Gorge visitor centers.

Type	Type Description ^a	Characteristics ^b
1	Low on all dimensions.	Low to moderate interest in all types of information. Tend to not participate in several activities. Groups of 3 to 5 people. No children along. Respondent tends to have some college education and is 45 to 54 years old.
2	Moderate on exploration-learning and utility-service. Low on other dimensions.	Moderate interest in plants, history, management, maps, and distance information. Low participation rate in most activities. Tends to stay in area two days. Destination is elsewhere. Groups of two, and no children along.
3	Moderate on exploration-learning. Low on other dimensions.	High to low interest in all types of information. Low participation rate in most activities listed. Tend to spend two days in area. Destination is elsewhere. Groups of two people with no children along. Respondent tends to have some college education and is between ages 45 and 54.
4	High on family/children orientation and exploration-learning. Low on other dimensions.	Moderate to high interest in geology, wildlife, ecology, and things to do types of information. Participation in camping, swimming, hiking, and rock-collecting. Groups of 3-5 people and children along.
5	High on affiliation within group and exploration-learning. Low on other dimensions.	No significant results found in types of information wanted. Participation in trailbiking with low amount of engagement in camping, swimming, fishing, or motorboating. Tend to spend two days in the area. Groups of 3 to 5 people with no children along.
6	Moderate on all dimensions except introspection where low interest was expressed.	Moderate interest in most types of information. Tend to participate in camping and fishing. Destination is Flaming Gorge. Groups of 3 to 5 people with children along. Respondent usually male and between the ages of 35 and 44.
7	High on family/children orientation. Moderate on affiliation within group and exploration-learning. Low on other dimensions.	Moderate interest in maps, weather, and things to do types of information. Tend to participate in camping, fishing, motorboating, and rafting. Tend to spend three days in area. Flaming Gorge considered destination. Groups of 6 to 10 people with children along. Respondent usually 35 to 44 years old.

Table 16--Continued.

Type	Type Description ^a	Characteristics ^b
8	High on exploration-learning. Moderate on other dimensions.	Moderate to high interest in all types of information except geology. Tend to engage in camping, swimming, picnicking, fishing, rock-collecting, and rafting. Tend to spend three days in area. Destination is Flaming Gorge usually. Children usually along. Respondent tends to be 35 to 44 years old.
9	High on exploration-learning.	Moderate to high interest expressed in several categories of information. Low participation rate in trailbiking, fishing, motorboating, rafting, and water-skiing. Tend to spend two days in area, but destination is elsewhere. Group of 2 people with no children along. Respondent tends to be male.
10	High on family/children orientation and exploration-learning. Moderate on introspection and affiliation within group. Low on utility-service.	Moderate to high interest in several categories of information. Tend to engage in swimming, picnicking, rock-collecting, motorboating, sightseeing, and water-skiing. Destination usually Flaming Gorge. Groups of 6 to 10 people with children along. Respondent tends to have some college education.
11	High on affiliation within group, family/children orientation, and exploration-learning. Low on other dimensions.	High interest in geology, wildlife, plants, and information on things to do in the area. Tend to engage in picnicking, fishing, and water-skiing. Destination is usually Flaming Gorge. Groups of 3 to 5 people with children along.
12	High on all dimensions except low on utility-service.	Moderate to high interest expressed in all types of information except maps. Tend to engage in trailbiking, fishing, and motorboating. Low participation rate in motorcycling. Usually spends three days in area with Flaming Gorge considered the trip destination. Respondent tends to have college education.

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^aFor type description and characteristics, values of 1-2 were considered low, 3-4 moderate, and 5-6 high.

^bInterpretation of participation was based on significant ($\alpha \leq 0.05$) correlations, where L values indicated tendencies to participate less in an activity, and H values indicated tendencies to participate more in an activity than the whole population.

Amphitheatres

Composite Audience Profiles

Reasons for Participating

The mean values for the clusters generated from Q1 are shown in Table 17.⁷ The need to learn, explore, and gain information ranked particularly high as reasons for participating, reflecting the importance of VIS programming. Amphitheatre audiences highly rated the desire to experience natural stimuli, suggesting that amphitheatre presentations with nature themes would be well received. A desire for orientation toward family and learning experiences for children was also evident. It appears that portions of amphitheatre programs developed entirely for children would be well received by most visitors.

Although the desire to be with known friends (Affiliation-Within Groups) was rated moderately high, the desire to meet new people (Affiliation-Outgroup) was rated low. In amphitheatre settings, the data suggest that efforts to maximize interaction between groups would not supply a primary source of satisfaction to many visitors.

For both visitor center and amphitheatre settings, most visitors responded that their reason for visiting was not simply because there was a lack of a better alternative. However, visitors to the amphitheatre setting responded positively to this suggestion with greater frequency than visitors to the visitor centers. This implies that in amphitheatre audiences, there may be some relatively disinterested participants who are there for lack of a better alternative.

⁷These are the same items and dimensions included in Table 14, except that the utility-service dimension and the item "To Look at the Exhibits Here" were omitted, and the affiliation-outgroup dimension was added.

Table 17. Reasons for participating in VIS programs at Flaming Gorge National Recreation Area--amphitheatre settings.

Reason ^a	Mean Value ^b
To get information about area	4.7
Experience natural stimuli	4.3
Exploration/learning	4.1
Learn what to do in the area	4.0
Family/children orientation	3.5
Affiliation within-group	3.1
Introspection	2.3
Lack of something better to do	2.3
Exercise	2.2
Affiliation out-group	2.2

^aReasons are more specifically identified in Table 2, except the following: Look at Exhibits, Get Information About the Area, and Learn What to Do in Area, which refer to Q1, items 41, 7, and 19, respectively. Also, Exercise was derived from items 12 and 18; Lack of Something Better to Do was derived from items 23 and 32; and Experience Natural Stimuli was derived from items 5 and 15. Affiliation Out-group was substituted for the Utility-Service dimension in cluster analysis, and included items 10, 17, and 28.

Information Interests

In question Q2 of the questionnaire, respondents were asked to rate their degree of interest in selected types of information which could be made available at the amphitheatre programs (Table 18). The highest preference was expressed for VIS programming related to natural history topics and human history. Visitors also felt that information on things to do in the area would be very interesting (4.5 on a 6-point scale).

At amphitheatre settings, relatively strong interest (above 3.5) was expressed for information on safety, the weather, and places to camp. Visitors might attach even greater value to the amphitheatre experience

Table 18. Degree of interest in selected types of information for visitors at amphitheatres at Flaming Gorge.

Types of Information	Mean Value ^a
Wildlife	5.2
Human history	4.8
Geology	4.7
Plants	4.6
Things to do in area	4.5
General ecology	4.0
Management of National Forest lands	4.0
Maps of the region	3.9
Safety	3.8
Weather	3.7
Places to camp	3.6
Distances	3.3
Overnight accommodations other than camping	2.9

^aScore range: 1-6, where 1.0 represents Not Interested and 6.0 represents Extremely Interested (see Q2, Appendix A).

when these topics are integrated into the program. This also suggests that many of the amphitheatre programs which deal solely with a theme of natural history interpretation may be inadequate in scope, in light of the range of visitor interests.

Visitors also expressed they were quite interested in information on the management of National Forest lands. As with the Flaming Gorge Visitor centers, the results imply the audiences' potential receptivity to messages focusing on forest management practices.

Question Q3 identified the range of recreational activities respondents engaged in during their trip to the area (Table 19). Auto driving for sight-seeing had the greatest participation, with over 69 percent of the respondents engaging in this activity. In addition, amphitheatre visitors frequently participated (over 40 percent participation) in camping, picnicking, fishing, and hiking. Since respondents expressed high interests in information about things to do in the area, interpretive messages incorporating these activities would probably be well received by a majority of the amphitheatre audiences.

Table 19. Proportion of visitors to the three amphitheatre settings engaging in selected recreation activities at Flaming Gorge.

Activities	Percent
Camping	91
Swimming	50
Picnicking	58
Hiking or Walking on Trails	63
Trailbiking	6
Motorcycling	8
Fishing	73
Rock-collecting	25
Motorboating	52
Auto Driving for Sightseeing	66
River Rafting	24
Water-skiing	27

Question Q4 asked respondents the extent to which they had previously participated in an amphitheatre program at Flaming Gorge (Table 20). Seventy-eight percent of the respondents had never participated in a program. In view of the large proportion of local visitation (approximately 75 percent live within 200 miles, Table 28), it is surprising that the frequency of repeat visitors to the amphitheatre programs is not higher. One implication might be that present programming is deficient in creating a desire for local visitors to re-engage in amphitheatre experiences.

Table 20. Degree of previous visitation to Flaming Gorge amphitheatre programs.

Degree of Visitation	Percent
Never Before	78
One Time	6
Two	6
Three	2
Four	2
Five	1
Over Five	7

Finally, questions Q5 and Q6 identified the type of trip in which the respondent was engaged, so that VIS program consumption could be evaluated in terms of the total trip experience (Tables 21 and 22). Among amphitheatre visitors, over 40 percent spent five or more days at Flaming Gorge. Over 80 percent of the respondents indicated that Flaming Gorge was their primary trip destination. These results, combined with the finding that a major information interest of these visitors is "to find things to do in the area," suggests that programs incorporating ways to allocate time in Flaming Gorge would be particularly well received.

Table 21. Number of days amphitheatre respondents spent at Flaming Gorge National Recreation Area.

Number of Days	Percent
One Day or Less	7
Two	16
Three	19
Four	16
Five	12
Over Five	30

Table 22. Trip destinations of visitors to Flaming Gorge amphitheatres.

Destination	Percent
Flaming Gorge National Recreation Area	82
Passing Through on Way to Somewhere Else	18

Socioeconomic Descriptors

The age and education distributions of amphitheatre program visitors are displayed in Tables 23 and 24. Once again, the data attest to the diversity of audiences at Flaming Gorge in their socioeconomic profiles. The results underscore the need for interpretation at different levels of complexity for Flaming Gorge audiences.

Table 25 reports the proportion of male and female respondents over the age of 17. There was a slightly higher proportion of females, accounting for 52 percent of the total response.

Table 23. Age distribution of visitors to Flaming Gorge amphitheaters.

Age	Percent
18-24	11
25-34	17
35-44	23
45-54	19
55-64	21
Over 65	9

Table 24. Educational distribution of visitors to Flaming Gorge amphitheatres.

Grade Completed	Percent
Grade	
8	3
9	1
10	3
11	4
12	38
College	
1	9
2	11
3	4
4	13
Over 5	15

Table 25. Proportion of males and females visiting Flaming Gorge amphitheatres.

Sex	Percent
Female	52
Male	48

Tables 26 and 27 describe the size of groups that respondents came in, and the presence of children within groups. Thirty percent of the visitors came to the amphitheatres in groups of six or more people. Over 55 percent of the respondents brought children along.

Table 26. Size of groups at Flaming Gorge amphitheatre programs.

Group Size	Percent
Self Only	3
2	24
3 - 5	45
6 - 10	23
11 - 15	2
16 - 21	2
Over 21	2

Table 27. Proportion of adult visitors who brought children with them to the Flaming Gorge amphitheatre programs.

Brought Children	Percent
No	44
Yes	56

The origin of the visitors, by state, is shown in Table 28. Over three-fourths of the respondents came from western states, with over half residing in Utah, primarily from the Wasatch Front area.

Table 28. Residential origins for the sample of Flaming Gorge amphitheatre visitors.

State	Number	(Percent)
<u>Northeast:</u>		
Maryland	4	(1)
New York	2	(a)
	<u>6</u>	<u>(2)</u>
<u>Southeast:</u>		
Alabama	2	(a)
Florida	4	(1)
	<u>6</u>	<u>(2)</u>
<u>Upper Midwest:</u>		
Illinois	8	(2)
Indiana	2	(a)
Iowa	2	(a)
Kansas	3	(a)
Michigan	5	(1)
Nebraska	5	(1)
Ohio	1	(a)
Wisconsin	1	(a)
	<u>27</u>	<u>(8)</u>
<u>Mid-South:</u>		
Arkansas	2	(a)
Missouri	3	(a)
Oklahoma	1	(a)
Texas	6	(2)
	<u>13</u>	<u>(4)</u>
<u>West:</u>		
Arizona	8	(2)
California	32	(9)
Colorado	46	(14)
Idaho	6	(2)
Montana	1	(a)
New Mexico	2	(a)
Utah	182	(54)
Wyoming	10	(3)
Washington	1	(a)
	<u>288</u>	<u>(85)</u>
TOTALS	<u>340</u>	<u>(100)</u>

^aLess than one percent.

Audience Diversity

Types of Audience Members

Five dimensions from the Q1 items (Table 14) were used in typing audience members. The dimensions were the same as for visitor center audiences except that the dimension defined as Affiliation-Outgroup, or meeting new people, was substituted for the Utility-Service dimension since the Utility-Service items were not included in the amphitheatre questionnaire. The other amphitheatre dimensions were: (1) Introspection, (2) Affiliation-Within Group, (3) Family/Children Orientation, and (4) Exploration/Learning.

The results of amphitheatre visitor typing are presented graphically in Figure 4. Twelve types of amphitheatre visitors were found. All but eight visitors (2 percent) were included in one of these twelve groups.

As with the visitor center population, one amphitheatre audience type was found to be composed of visitors attaching little or no importance to any of the five reasons for participating (Type 1). These visitors, comprising 8 percent of the amphitheatre audience, may be potential dropouts from any VIS program activity.

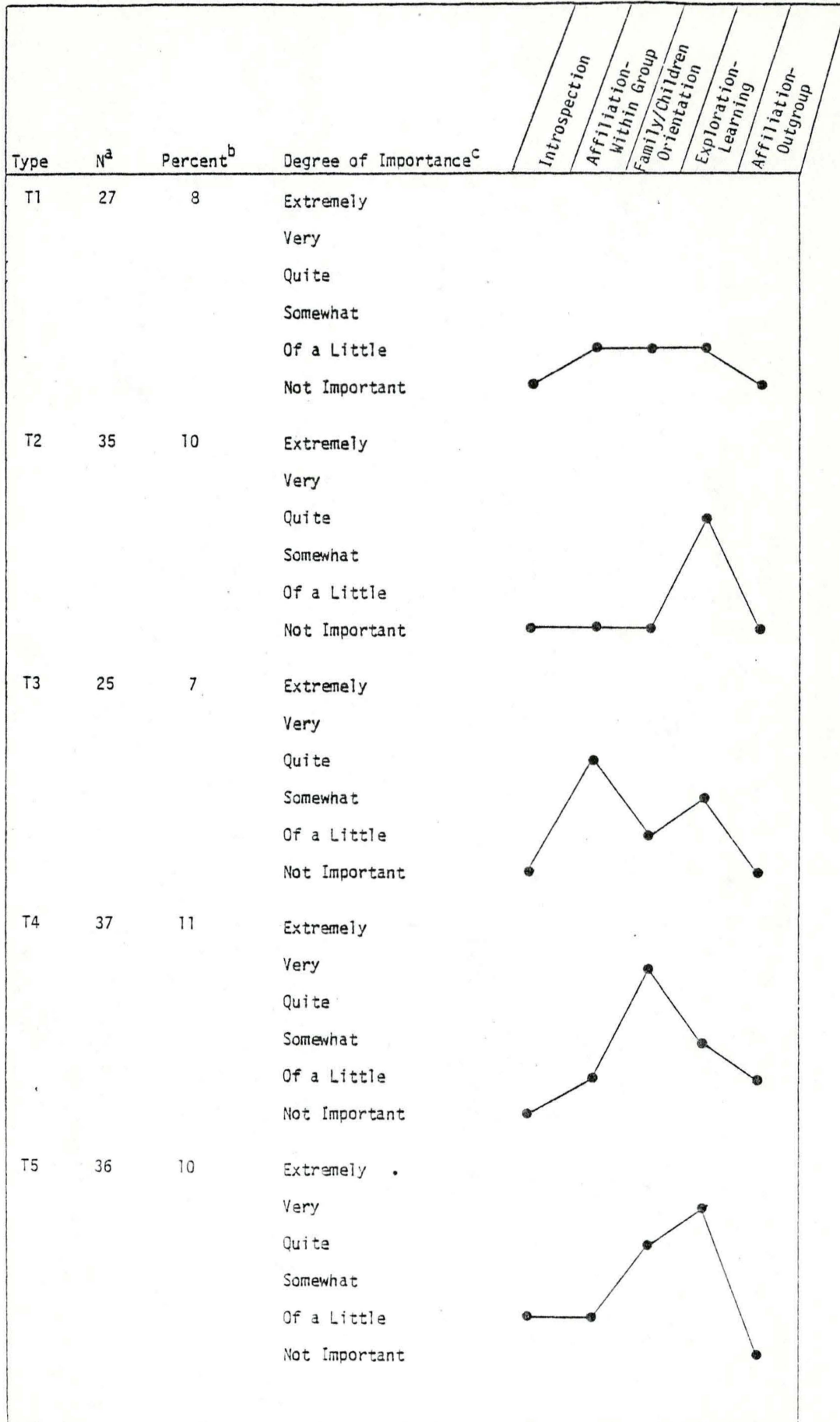
Type 2 finds exploration and learning quite important, but has no interest in the other reasons listed. Type 3 is quite interested in affiliating within the party and has some interest in opportunities to learn from amphitheatre programs. Type 4 desires a family-children related experience at amphitheatre programs and has some interest in learning opportunities. Type 5 is similar to Type 4, but also expresses strong interest in exploration and learning. Type 6 finds exploration and learning very important and has moderate interest in introspection and affiliation with known or unknown people. Type 7 finds all the dimensions to be somewhat to quite important. Type 8 expressed very strong interest in exploration-learning, little interest in introspection, and moderate interest in the other dimensions. Type 9

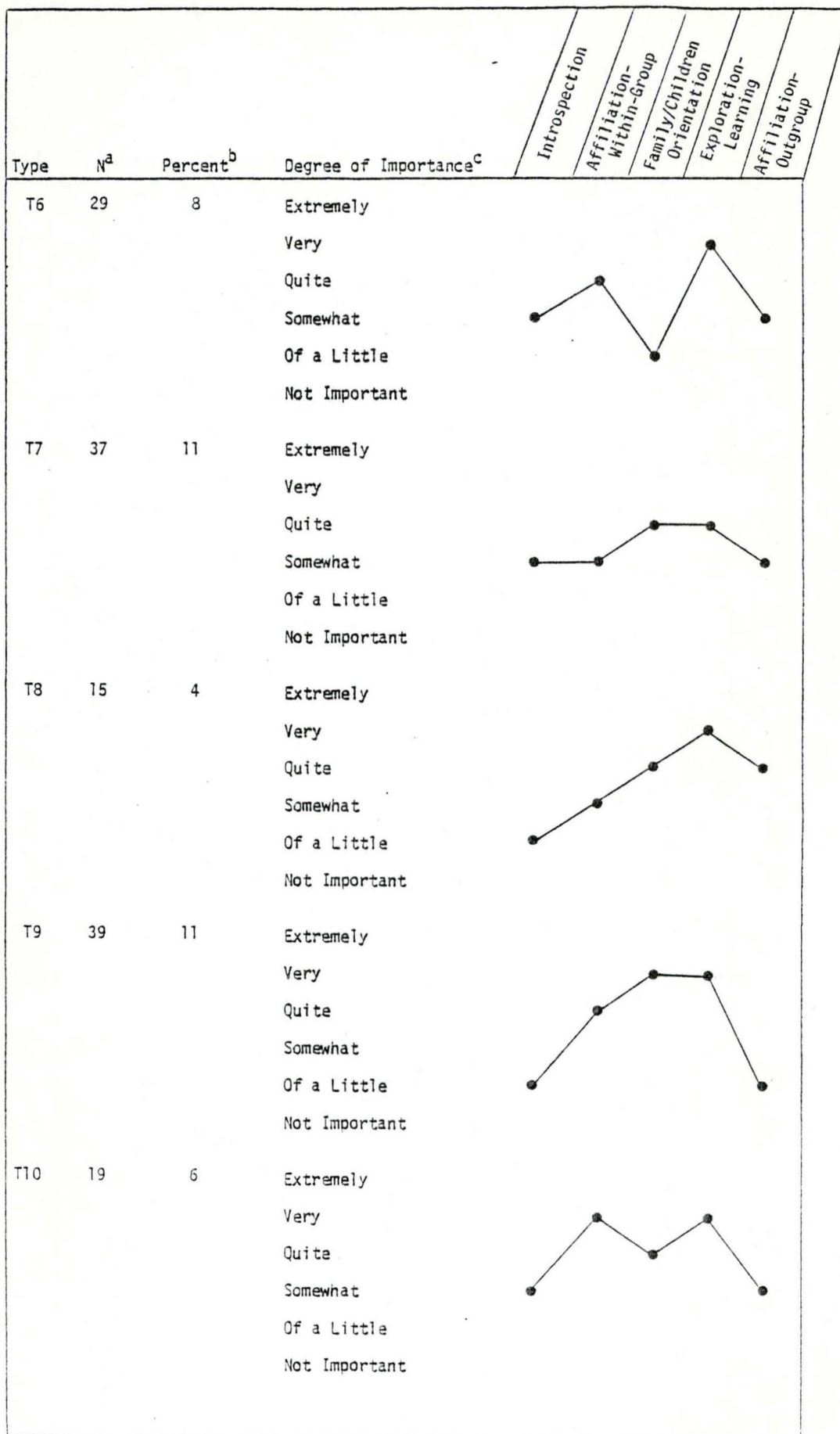
emphasizes family/children orientation and learning opportunities, while placing moderate importance on within-group affiliation. Type 10 attaches strong importance to affiliation among known people and exploration-learning, and finds only moderate importance in the other reasons for participating. Type 11 attaches strong importance to family/children orientation and exploration-learning opportunities, moderate importance to introspection and within-group affiliation, and little importance to outgroup affiliation. Type 12 has strong interest in all the dimensions. Along with Type 11, Type 12 finds introspection to be quite an important reason to participate. Of all the groups, Type 12 placed the greatest importance on meeting new people as a reason for coming to the amphitheatre. Among the groups, Type 12 participants appear to be the most enthusiastic and would be most receptive to a variety of VIS programs.

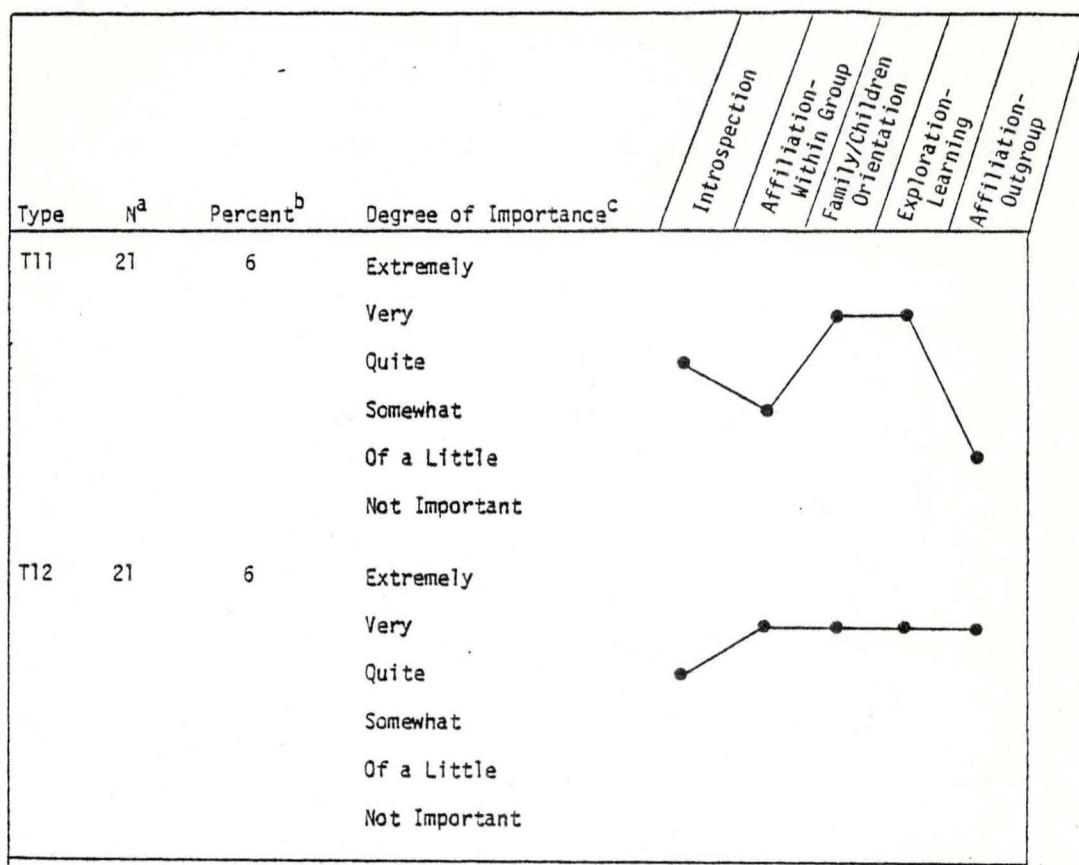
For all types except 1, 3, and 4, moderate to strong interest was expressed for opportunities to explore and learn. A greater proportion of the population of amphitheatre visitors was interested in experiences oriented toward family and children than was true for the visitor center populations. Sixty-nine percent of the visitors were described by types which rated this dimension as at least quite important (4.0 on a 6-point scale, Types 4, 5, 7, 8, 9, 10, 11, and 12).

The data in Figure 4 suggest that efforts in VIS programming to promote affiliation among known people would be particularly enjoyed by Types 3, 6, 9, 10, and 12 (38 percent of the respondents). In contrast, efforts to stimulate interactions between people who do not know each other would be popular only among types 8 and 12 (10 percent of the population; 4.0 on a 6.0 scale). Similarly, reflective or introspective themes would be popular only among 12 percent of the population (types 11 and 12). The data support

Reasons for Participating^d







^aThere were 349 cases subjected to cluster analysis.

^bThere are 8 unique individuals, or 2 percent of the total sample were not grouped into types.

^cThe adjectives correspond to the 6.0 scale used, where 1.0 represents Not Important and 6.0 represents Extremely Important.

^dThe items from which the dimensions were derived are displayed in Table 14, except that Affiliation Out-group was substituted for the Utility-Service dimension, and includes items 10, 17, and 28.

Figure 4. Graphic representation of visitor groups based upon reasons for participating in amphitheatre programs at Flaming Gorge.

the notion that amphitheatre programs designed to provide opportunities for introspection and outgroup-affiliation would not match the interests of a majority of amphitheatre visitors.

Variables Related to Audience Types

Identifying relationships among types aids in understanding amphitheatre audiences. The relationships of audience types to information interests, activities engaged in, and socioeconomic profiles are shown in Table 29. Table 30 contains a verbal summary of these relationships of audience types that are quantitatively displayed in Table 29.

It can be seen from reading Table 29 along the rows that, for example, Type 1 expressed low to moderate interest in all categories of information listed, tended to not participate in picnicking, hiking, rock-collecting, and sightseeing, and tended not to have children along. In contrast, Type 9 expressed moderate to high interest in most categories of information listed, tended to not participate in motorcycling, considered Flaming Gorge their primary trip destination, tended to come in groups of 6 to 10 people, tended to have children along, and were between ages 35 and 44 years old.

Reading down the columns reflects how individual items can aid in distinguishing among audience types. For example, types 1, 2, 3, and 4 expressed moderate interest in safety information desires, while types 9, 10, 11, and 12 expressed high interest for the same item. Response to question Q9, "Did children come with you," showed the greatest differences between types of visitors. As one would expect, the presence of children greatly affects the importance of the different dimensions for each type. For instance, all of the types for whom the family/children dimension was unimportant contained few parties with children.

Table 29. Flaming Gorge amphitheatre audience types and variable correlations, with types on the left and type means significantly different ($\alpha \leq .05$) from population mean on the right.

TYPES						INFORMATION WANTS													ACTIVITIES ENGAGED IN ^a											OTHER									
Type Number	Introspection	Affiliation-Within Group	Family-Children Orientation	Exploration-Learning	Affiliation-Out Group	Geology	Wildlife	Plants	Human History	Management	Ecology	Place to Camp	Place to Stay Overnight	Maps	Weather	Things to Do in Area	Distance	Safety	Camp	Swim	Picnic	Hike	Trailbike	Motorcycles	Fish	Rock-collecting	Motorboat	Sightseeing	Raft	Waterski	Days Will Stay	Destination ^b	Group Size ^c	Children Along ^d	School Completed ^e	Sex ^f	Age ^g		
T1	1	2	2	2	1	3.6	4.4	3.6	4.2	3.1	2.3	2.9	1.7	2.8	2.6	3.5	2.7	2.5			L	L				L		L						1.3					
T2	1	1	1	4	1				4.3	3.1	3.4	2.6	2.1	3.2		3.5	2.1	3.0		L	L				L		L				L		1.3	2.4	1.2			4.1	
T3	1	4	2	3	1	4.2				3.1						3.8		3.1	L	L	L		L	L				L						1.3					
T4	1	2	5	3	2		4.7	4.3	4.4		3.5	3.1	2.5	3.2	3.1		2.6	3.3	H	H	H			H	H							1.1		1.9					
T5	2	2	4	5	1	5.4		5.1												H			H	L		H								1.7		1.7			
T6	3	4	2	5	3					4.4							3.8		L	L	L		H		H					L	L	4.4		2.7	1.1			4.4	
T7	3	3	4	4	3		4.9																						H					3.5	1.9			3.1	
T8	2	3	4	5	4											5.4								H		L				H	5.2			11	1.3				
T9	2	4	5	5	2	5.1	5.5		5.3		4.7	4.2	3.3	4.6	4.3	5.2		4.5	H		H	H		L				H					1.1	3.5	1.9			3.0	
T10	3	5	4	5	3		5.7	5.4	5.4	4.6	4.6	4.4				5.2	4.6	4.8	H	L	H		H											1.3					
T11	4	3	5	5	2					4.5	5.0					5.1		4.6								H							1.3						
T12	4	5	5	5	5					4.6		4.8	4.6	4.6	4.6	5.2	4.6	4.9					L							L									
\bar{X}	2.3	3.2	3.6	4.3	2.3	4.7	5.2	4.6	4.8	4.0	4.0	3.6	2.9	3.9	3.7	4.5	3.3	3.8	91%	50%	58%	63%	6%	8%	73%	25%	52%	66%	24%	27%	4.0	1.2	3.1	1.6	13	1.5	3.5		

1 - No Importance
2 - Of a Little Importance
3 - Somewhat Important
4 - Quite Important
5 - Very Important
6 - Extremely Important

^aLetters represent whether type was significantly lower (L) or higher (H) than mean of population for participation in an activity.

^bAnswers coded 1 (Flaming Gorge is trip destination) and 2 (elsewhere). (See question Q6, Appendix A.)

^cAnswers coded 1 (self), 2 (2), 3 (3-5), 4 (6-10), 5 (11-15), 6 (16-21), and 7 (over 21). (See question Q8, Appendix A.)

^dAnswers coded 1 (No children along) and 2 (Children along). (See question Q9, Appendix A.)

^eAnswers coded by year of school completed (e.g., 13 represents one year college, and 17 represents greater than 4 years college). (See question Q10, Appendix A.)

^fAnswers coded 1 (Male) and 2 (Female). (See question Q11, Appendix A.)

^gAnswers coded 1 (18-24), 2 (25-34), 3 (35-44), 4 (45-54), 5 (55-64), and 6 (65 and over). (See question Q12, Appendix A.)

Table 30. Audience type description and characteristics for Flaming Gorge amphitheatre programs.

Type	Type Description ^a	Characteristics ^b
1	Low on all dimensions.	Moderate to high interest in all types of information desired. Tend to not participate in picnicking, hiking, rock-collecting, and sightseeing. Tend to have no children along.
2	Moderate on exploration-learning. Low on other dimensions.	Low to moderate interest in several categories of information. Tend to not participate in swimming, picnicking, fishing, motor-boating, and water-skiing. Destination usually Flaming Gorge. Groups of 2 people with no children along. Respondent tends to be between ages 45 and 54.
3	Moderate on affiliation within group and exploration-learning. Low on other dimensions.	Moderate interest in several kinds of information. Tend to not participate in camping, swimming, hiking, trailbiking, motor-cycling, and sightseeing. Children are usually not along.
4	High on family/children orientation. Moderate on exploration-learning. Low on other dimensions.	Moderate interest in most categories of information. Tend to engage in camping, swimming, picnicking, motorcycling, and fishing. Destination is usually Flaming Gorge. Children are usually along.
5	High on exploration-learning. Moderate on family/children orientation. Low on other dimensions.	High interests in information about geology and plants. Tend to engage in swimming, trailbiking, and rock-collecting, and not participate in motorcycling. Children are usually along, and the respondent tends to be female.
6	High on exploration-learning. Moderate on introspection and affiliation in and out of groups. Low on family/children orientation.	Moderate interest expressed for management and distance information. Tend to engage in trailbiking and fishing, and not in camping, swimming, picnicking, rafting, and water-skiing. Tend to spend four days in the area. Groups of 3 to 5 people with no children along. Respondent usually 45 to 54 years old.
7	Moderate on all dimensions.	High interest in wildlife information. Tend to participate in rafting. Groups of 6 to 10 people with children along. Respondent usually 35 to 44 years old.
8	High on exploration-learning. Moderate on other dimensions except low on introspection.	High interest on information about things to do in the area. Tend to engage in motorcycling and water-skiing and not in rock-collecting. Usually spend five days in the area. A large proportion of members not finishing high school. Respondent tends to be male.

Table 30--Continued.

Type	Type Description ^a	Characteristics ^b	
9	High on family/children orientation and exploration-learning. Moderate on affiliation within group. Low on other dimensions.	Moderate to high interest expressed in most categories of information. Tend to participate in camping, picnicking, hiking, and sightseeing, and not in motorcycling. Destination is usually Flaming Gorge. Groups of 6 to 10 people with children along. Respondent usually between 35 and 44 years old.	
10	High on affiliation within group and exploration-learning. Moderate on other dimensions.	Moderate to high interest in most information. Tend to participate in camping, picnicking, and trailbiking. Children are usually not along.	
11	High on family/children orientation and exploration-learning. Moderate on introspection and affiliation within group. Low on out-group affiliation.	High interest in information about things to do in the area, safety, ecology and management of area. Tend to participate in rock-collecting. Destination is usually Flaming Gorge.	
12	High on all dimensions, except moderate on introspection.	High interest expressed for most types of information. Tend to not engage in trailbiking and water-skiing.	151

^aFor type description and characteristics, values of 1-2 were considered low, 3-4 moderate, and 5-6 high.

^bInterpretation of participation was based on significant ($\alpha \leq 0.05$) correlations, where L values indicated tendencies to participate less in an activity, and H values indicated tendencies to participate more in an activity than the mean of the population.

Cranberry Mountain Visitor Center

Composite Audience Profiles

Reasons for Participating

In the analysis of Q1 items, several clusters were identified as reasons for participating in the visitor center. Mean scores for the clusters are shown in Table 31.⁸ Also shown are four items which failed to cluster with the other items:

For a change of pace,
It was something to do with my time,
Because I didn't have anything better to do,
To obtain a map of the area,

The reason given the most importance by visitors was to experience natural stimuli. Other reasons highly favored included looking at exhibits, exploration-learning, getting information about the area, and learning what to do in the area. Less important reasons included for lack of something better to do, meeting new people, and utility-service functions of the visitor center.

The Cranberry profile suggests that visitors have higher interests in interpretive programming than in visitor orientation, and reaffirms the utility of interpretive efforts in VIS programming. This also has important implications to VIS personnel as to how much time, space, and money should be allocated to different program themes. In particular, visitors are looking for VIS experiences that accommodate the desires to observe and be close to nature.⁹

The less important reasons for participating in VIS programs included the utility-service functions of the visitor center and for lack of something

⁸Items having an average Pearson product-moment of 0.4 or higher and an Alpha reliability of 0.7 or higher were included in the cluster.

⁹The Experience Natural Stimuli cluster was created from items 5 and 15 of the questionnaire (see Q1, Appendix A).

Table 31. Reasons for participating in VIS programs at Cranberry Mountain Visitor Center.

Reason ^a	Mean Value ^b
Experience Natural Stimuli	5.0
Look at Exhibits	4.6
Exploration/Learning	4.4
Get Information About Area	4.2
Learn What to Do In Area	4.0
Affiliation-Within Group	3.8
Family/Children Orientation	3.6
Exercise	3.1
Introspection	2.9
Utility-Service	2.6
Affiliation-Outgroup	2.3
Lack of Something Better to Do	2.0

^aReasons are more specifically identified in Table 43, except for the following: Look at Exhibits, Get Information About the Area, and Learn What to Do in Area which refer to Q1, items 41, 7, and 19, respectively. Also, exercise was derived from items 12 and 18; Affiliation-Outgroup was derived from items 10, 17, and 28; Lack of Something Better was derived from items 23 and 32; and Experience Natural Stimuli was derived from items 5 and 15 (See Q1, Appendix A).

^bScore ranges: 1-6, where 1.0 represents Not Important and 6.0 represents Extremely Important (See Q1, Appendix A).

to do. The findings suggest that visitors still attach some value to these reasons for coming to the visitor center, although they are not regarded with as much importance. In addition, visitors expressed low interest in affiliation with unknown people. Aspects of VIS experiences which encourage interaction among groups of visitors may distract from a satisfying experience for some visitors.

Family/children orientation ranked seventh among the twelve reasons for coming to the visitor center, with a mean value of 3.6 (corresponding to Quite Important on the 6.0 scale). The moderate importance given to this reason suggests that the visitor center offers a valuable experience for children and provides an activity that the entire family can engage in together.

The desire to introspect ranked ninth in reasons for participating, with a mean value of 2.9 (Somewhat Important). Interpretive programs based upon an introspective or reflective theme would not fit the reasons most visitors expressed for coming to the Cranberry Mountain Visitor Center. Since learning and exploration ranked higher, programs developed on educational themes would seem to more closely fit the desires of participants.

Information Interests

Table 32 shows the degree of interest visitors expressed for types of information which could be made available at the visitor center. Visitors expressed highest interest in natural and cultural history topics (wildlife, plants, geology, human history, and ecology). They also expressed interest in orientation information. The rank of the information topics relative to one another has important implications. Overall, orientation types of information (e.g., things to do, maps, places to camp) ranked second to the natural and cultural history topics. This suggests that while visitors are

Table 32. Degree of interest in selected types of information by visitors at Cranberry Mountain Visitor Center.

Type of Information ^a	Mean Score ^b
Wildlife	5.2
Plants	5.0
Geology	4.6
Human History	4.4
General Ecology	4.2
Things to Do in Area	4.0
Maps of the Region	4.0
Management of National Forest Lands	3.9
Weather	3.4
Safety	3.2
Places to Camp	3.1
Distances	3.0
Overnight Accommodations Other than Camping	2.4

^aTaken from question Q2, Appendix A.

^bScore Range: 1-6, where 1.0 represents Not Interested and 6.0 represents Extremely Interested.

quite interested in orientation information (4.0 on a 6.0 scale), they show higher interest in natural and cultural history types of information (5.0 on a 6.0 scale).

Management of National Forest lands, a topic which receives considerable emphasis at the Cranberry Mountain Visitor Center, received moderately strong interest (the mean score was 3.9, corresponding to "Quite Interested"). Similar to the Flaming Gorge results, this documents the visitor's potential receptivity for messages intended to increase public awareness and understanding of forest management objectives.

Question 3 asked about the range of recreational activities pursued by respondents during their stay at Cranberry Mountain (Table 33). The data indicate auto driving for sightseeing and hiking were the two most popular activities among respondents. The popularity of activities may serve as an indicator of visitor receptivity to interpretive messages delivered about recreational opportunities.

Table 33. Proportion of visitors engaging in selected recreational activities at Cranberry Mountain Visitor Center.

Activities	Percent
Camping	35
Swimming	15
Picnicking	37
Hiking or Walking on Trails	64
Trailbiking	3
Motorcycling	3
Fishing	26
Rock-collecting	15
Auto Driving for Sightseeing	69
Backpacking	17

Respondents were then asked how many times they had previously visited Cranberry Mountain Visitor Center (Question Q4). Table 34 shows that 57 percent of the visitors had never visited Cranberry Mountain Visitor Center previously. This indicates that information focusing on visitor orientation may be consumed by over half of the visitors at the Center.

Table 34. Degree of previous visitation to Cranberry Mountain Visitor Center.

Degree of Visitation	Percent ^a
Never Before	57
One Time	10
Two	7
Three	6
Four	5
Five	2
Over Five	13

^aThe percentages reported are relative to the size of the sample of those visitors that answered portions of Q4 (Appendix A). Out of 606 samples, 20 people did not answer part one.

Questions 5 and 6 were asked so that visitation could be evaluated in terms of the total trip or experience. Table 35 indicates that over 60 percent of the visitors spent one day or less in the Cranberry Mountain area on the particular trip they were sampled. Ninety percent of the visitors spent three days or less in the area.

Table 36 indicates that of those respondents sampled at Cranberry Mountain Visitor Center, less than 40 percent considered the Cranberry Mountain area as their final destination. The data suggest that in addition to VIS programs centering on the unique and outstanding attributes of the

Table 35. Number of days visitor center respondents spent in the Cranberry Mountain area.

Number of Days	Percent
One Day or Less	63
Two	17
Three	10
Four	3
Five	2
Over Five	5

Table 36. Trip destination of visitors at Cranberry Mountain Visitor Center.

Destination	Percent
Cranberry Mountain	40
Passing Through on Way to Somewhere Else	60

Cranberry Mountain area, a more generalized program may be valued by visitors who can utilize such knowledge in other geographical settings where they may be traveling.

Socioeconomic Descriptors

Tables 37 and 38 summarize the age and educational structure of the Cranberry respondents. The descriptors imply a need for VIS programs at different levels of complexity due to the diversity of educational levels and ages. Table 39 shows the ratio of males to females over 17 years old. Representation from both sexes was approximately equal.

Table 37. Age distribution of visitors at Cranberry Mountain Visitor Center.

Age	Percent
18-24	18
25-34	27
35-44	19
45-54	19
55-64	12
Over 65	5

Table 38. Educational distribution of visitors to Cranberry Mountain Visitor Center.

Highest Grade Completed	Percent
Grade	
8	4
9	2
10	3
11	2
12	40
College	
1	6
2	6
3	6
4	12
5 and Over	19

Table 39. Proportion of males and females visiting Cranberry Mountain Visitor Center.

Sex	Percent
Male	51
Female	49

Questions 8 and 9 were asked to provide information about group compositions (Tables 40 and 41). Most of the visitors attending the Visitor Center came in small groups. Table 40 shows that 70 percent of the visitors came in groups of five or less people, and only 7 percent of the visitors came in groups of over ten people. Table 41 shows the results for groups including children. Over half of the visitors (56 percent) did not have children along on their trip.

Table 40. Size of groups visiting Cranberry Mountain Visitor Center.

Group Size	Percent
Self Only	2
2	28
3-5	48
6-10	16
11-15	4
16-21	2
Over 21	1

Table 41. Proportion of adult visitors who brought children with them to Cranberry Mountain Visitor Center.

Brought Children	Percent
Yes	56
No	44

The origins of the visitors, by state, are displayed in Table 42. Three-fourths of the visitors came from the southeast part of the country, with over 58 percent of the total respondents from West Virginia. The upper mid-west states sent 13 percent of the respondents, most of whom were from Ohio. The western states accounted for the smallest percentage of visitors, with California and Arizona totals combining for only 1 percent.

Table 42. Residential origins for the sample of visitors at Cranberry Mountain Visitor Center.

<u>Northeast:</u>		
Maryland	26	(5)
Massachusetts	1	(a)
New Jersey	3	(a)
New York	1	(a)
Pennsylvania	23	(5)
Washington, D.C.	3	(a)
	<hr/> 57	<hr/> (10)
<u>Southeast:</u>		
Alabama	2	(a)
Florida	11	(1)
Georgia	1	(a)
Kentucky	6	(1)
Tennessee	4	(1)
Virginia	46	(9)
West Virginia	355	(61)
North Carolina	7	(1)
South Carolina	4	(1)
	<hr/> 436	<hr/> (75)
<u>Upper Midwest:</u>		
Ohio	55	(12)
Indiana	9	(1)
Michigan	2	(a)
Wisconsin	1	(a)
South Dakota	1	(a)
Illinois	7	(a)
	<hr/> 75	<hr/> (13)
<u>Mid South:</u>		
Missouri	5	(1)
Arkansas	1	(a)
Texas	3	(a)
	<hr/> 9	<hr/> (1)
<u>West:</u>		
Arizona	1	(a)
California	2	(a)
	<hr/> 3	<hr/> (1)
<hr/>		
TOTALS	580	(100)

^aLess than one percent.

Audience Diversity

Types of Audience Members

For the Cranberry Mountain Visitor Center, respondents were typed based on similarity in response to the five dimensions identified in Table 43. Eleven types of visitors were identified and are graphically shown in Figure 5. Note that all but 56 visitors, or 9 percent, were placed in one of the eleven groups.

Table 43. Cranberry Mountain Visitor Center groupings of Q1 (reasons for participating) items as identified by cluster analysis.

Introspection

- To think about who I am
- To help me understand what life is all about
- To think about my personal values

Affiliation Within-Group

- I thought I would like the company of the people who came with me
- To be with people who are enjoying themselves
- So I could do something with my companions

Family/Children Orientation

- I thought it would be a good experience for the family
- So my children could learn things here
- So the family could do something together
- To teach my children about things here

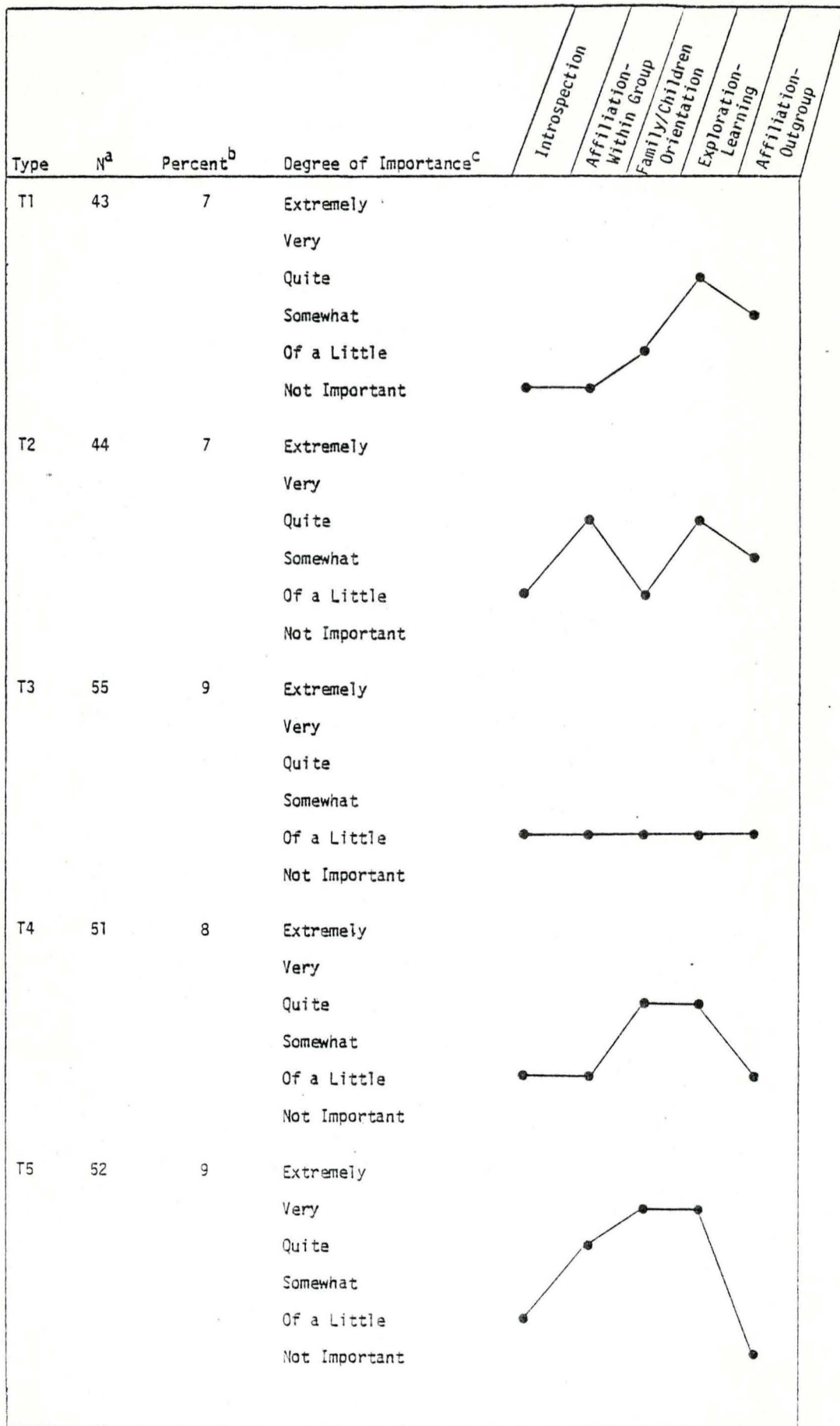
Exploration-Learning

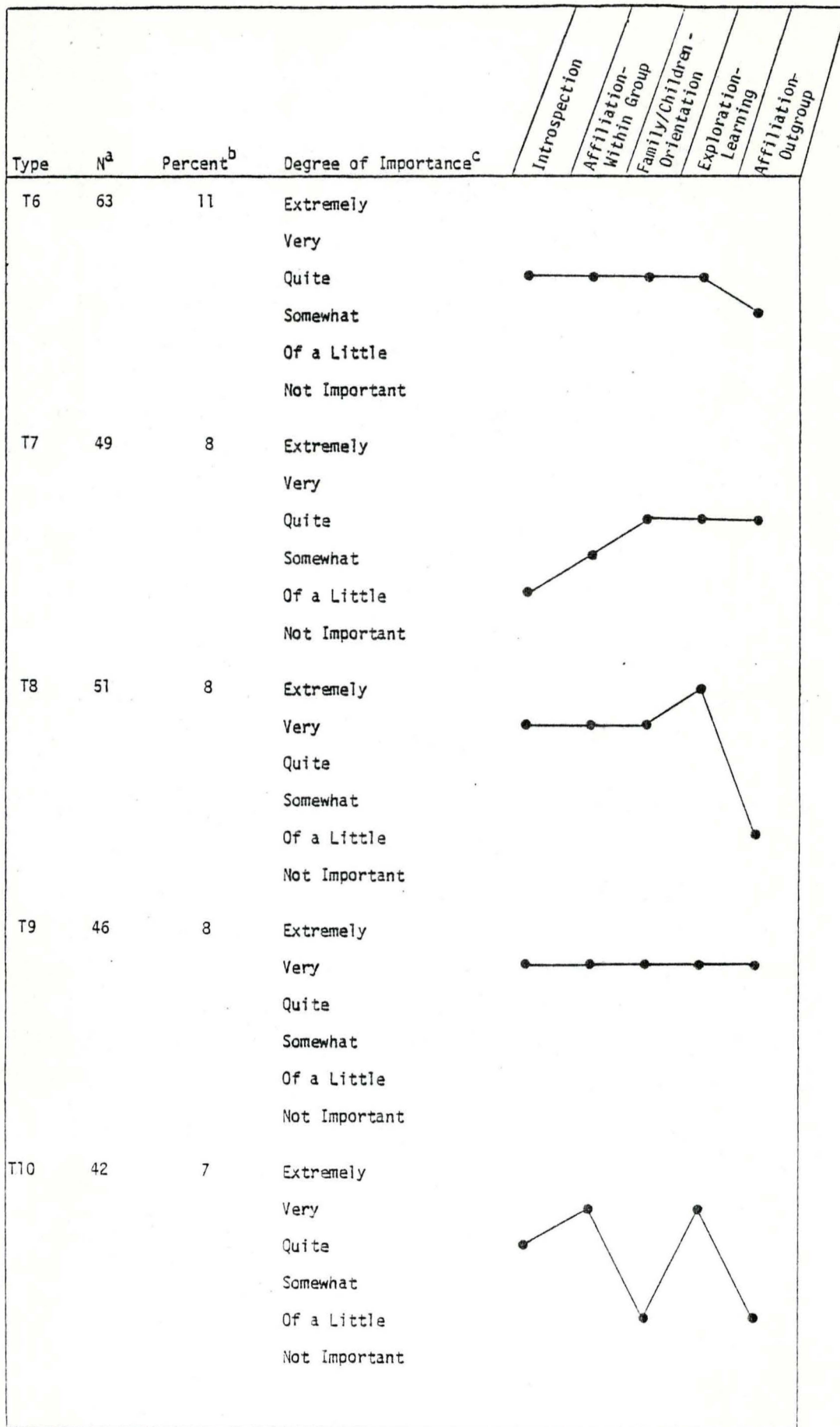
- To find out about things
- Because of the sense of discovery here
- To explore things
- So I could learn something new
- To increase my knowledge

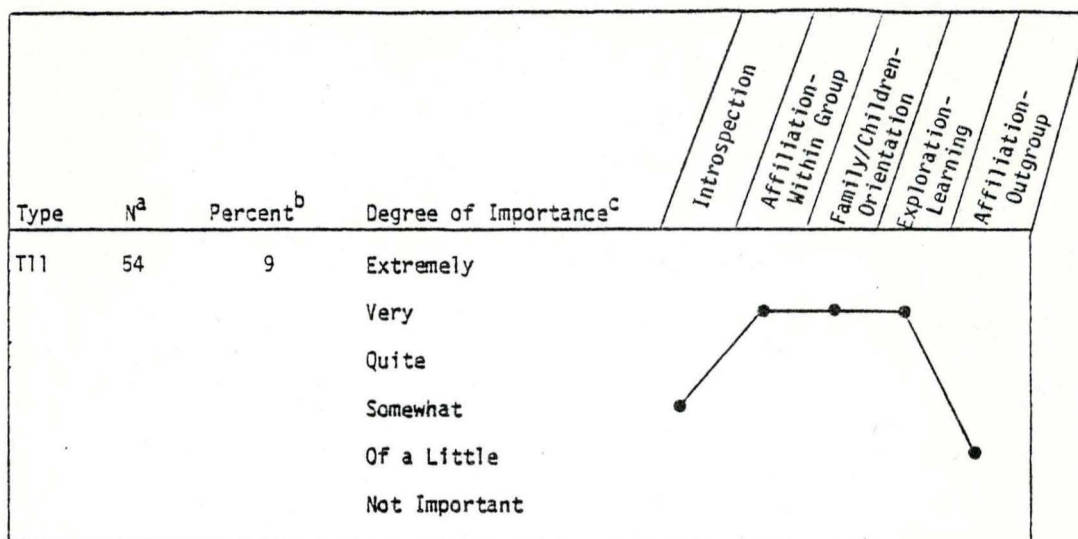
Utility-Service

- To obtain a map of the area
 - To use restroom facilities
 - To get a drink of water
 - To see where I can find a place to stay overnight
 - For a break from driving
-

Reasons for Participating^d







^aThere were 606 cases used in cluster analysis.

^bThere are 56 unique individuals, or 9 percent of the total sample were not grouped into types.

^cAdjectives correspond to the 6.0 scale, where 1.0 represents Not Important and 6.0 represents Extremely Important.

^dThe items from which the dimensions were derived are displayed in Table 43.

Figure 5. Graphic representation of visitor groups based upon reasons for participating at Cranberry Mountain Visitor Center.

A brief description of each type may be helpful. Type 1 is moderately motivated by exploration-learning opportunities, utility-service functions, and has little interest in other reasons for participating. Type 2 is similar to Type 1, except that they are also moderately interested in affiliation with known people.

The Type 3 profile attaches little value to any of the five dimensions. There may be little that can be done in VIS programming to meet their desires since they tend to be non-specific in their interests. This type accounts for 9 percent of the population. Type 4 shows moderate interest in exploration-learning opportunities and family-children orientation. Type 5 attaches high value to both exploration-learning and family-children orientation, and moderate value to affiliation with known people. At the same time, Type 5 attaches no value to the utility-service reasons for participating.

Type 6 displays moderate interest in all dimensions. This type may be interested in participating in a variety of VIS programs. Type 7 shows moderate to strong interest in affiliation with known people, family-children orientation, exploration-learning, and utility-service reasons for consuming VIS opportunities.

Type 8 displayed the highest interest of all types in exploration-learning opportunities and showed high interest in introspection, within-group affiliation, and family-children orientation. At the same time, this type showed no interest in utility-service as a reason for consuming VIS programming.

Type 9 attached high interest in all of the reasons for participating, including the highest rating given to utility-service. This type may display the most enthusiasm for a variety of VIS programs. Type 10 shows high interest in exploration-learning and little interest in family-children

orientation and utility-service. Finally, Type 11 shows high interest in within-group affiliation, family-children orientation, and exploration-learning, and some interest in introspection opportunities.

For all types except 3, visitors attached strong importance to the visitor center setting for providing opportunities to explore and learn. This reflects the opinion of more than 90 percent of the population. On the other hand, only 16 percent of the population found utility-service functions quite important (4.0 on a 6-point scale; types 7 and 9).

Some of the data point to the diversity of audiences among their reasons for coming to the visitor center. For example, about one-third of the respondents felt that introspection was quite important (4.0 or greater on a 6-point scale; types 6, 8, 9, 10). The other two-thirds felt introspection was of little or no importance as a reason for consuming VIS programs. Similar polarity occurred for family-children orientation, where 70 percent of the respondents felt it was quite important (4.0 on a 6-point scale; all types except 1, 2, 3, 10), while the remaining types found the reason to be of little or no importance. Finally, 59 percent of the respondents felt that affiliation with known people was quite important (4.0 on a 6-point scale; all types except 1, 3, 4, and 7). In contrast, 24 percent felt that it was of little or no importance as a reason for participating.

Variables Related to Audience Types

The final step in the analysis was to determine if respondents who belong to the same type vary in their information interests and socioeconomic profiles. Table 44 reports the results.

For example, it can be seen that Type 3 expressed low to moderate interest in most categories of information desired, tended to spend three

Table 44. Cranberry Mountain Visitor Center audience types and variable correlations, with types on left and type means significantly different ($\alpha \leq .05$) from the mean of the population on the right.

TYPES						INFORMATION WANTS														OTHER							
Type Number	Introspection	Affiliation-Within Group	Family-Children Orien.	Exploration-Learning	Utility/Service	Geology	Wildlife	Plants	Human History	Management	Ecology	Camping Places	Accommodations	Maps	Weather	Things to Do	Distance	Safety	Have Visited Before	Times Visited	Days Will Stay	Destination ^a	Group Size ^b	Children Along ^c	School Completed ^d	Sex ^e	Age ^f
1	1	1	2	4	3				3.7	3.0							2.1	2.0		2.9			2.6	1.1	15		
2	2	4	2	4	3				3.7									2.6		3.2				1.1	14		
3	2	2	2	2	2	3.8	4.5	4.3	3.3	3.0	3.2			3.3		3.1	2.3	2.1		2.7					14		
4	2	2	4	4	2	3.9	4.6	4.4	3.8			2.4		3.1	2.5		2.4	2.5		3.5			3.3	1.8			
5	2	4	5	5	1		5.4	5.3			4.6				2.7					2.7		1.6	3.3	1.6			
6	4	4	4	4	3					4.2	4.4	3.4	2.8	4.2	3.8	4.4	3.5	3.7		3.4						1.6	3.2
7	2	3	4	4	4				4.7				2.8	4.3	3.8	4.3	3.4	3.7	1.6	4.0		1.8		1.7	14		
8	5	5	5	6	2	5.2	5.6	5.6	5.0	4.5	4.6				3.6	4.4	3.3	3.7	1.6	4.3	2.4		3.3	1.7			
9	5	5	5	5	5	5.3	5.5	5.4	5.2	5.2	4.8	4.1	3.7	4.8	4.3	5.0	4.1	4.5	1.6	3.6			3.2			3.4	
10	4	5	2	5	2			5.3												2.5			3.3	1.2	14		
11	3	5	5	5	2	4.8	5.6	5.4	5.3	4.5	4.5			4.3		4.3	3.4	3.9	1.6	3.9			3.3	1.7			
Mean	2.9	3.6	3.6	4.4	2.6	4.6	5.2	5.0	4.4	4.0	4.2	3.1	2.4	4.0	3.4	4.0	3.0	3.2	1.4	3.5	1.8	1.6	3.0	1.5	13	1.5	3.0

- 1 - Not Important
- 2 - Little Importance
- 3 - Somewhat Important
- 4 - Quite Important
- 5 - Very Important
- 6 - Extremely Important

^aAnswers coded 1 (Cranberry Mountain as trip destination) and 2 (elsewhere). (See Q6, Appendix A.)

^bAnswers coded 1 (self), 2 (2), 3 (3-5), 4 (6-10), 5 (11-15), 6 (16-21), and 7 (Over 21). (See Q8, Appendix A.)

^cAnswers coded 1 (No children along) and 2 (Children along). (See Q9, Appendix A.)

^dAnswers coded by year of school completed (e.g., 13 represents one year of college, and 17 represents over four years in college). (See Q10, Appendix A.)

^eAnswers coded 1 (male) and 2 (female). (See Q11, Appendix A.)

^fAnswers coded 1 (18-24), 2 (25-34), 3 (35-44), 4 (45-54), 5 (55-64), and 6 (65 and over). (See Q12, Appendix A.)

days in the Cranberry Mountain area, and had some college-level education. In contrast, Type 9 expressed moderate to high interest in all of the information categories, tended to have visited about four times before, came in groups of 3 to 5 people, and had a respondent typically between ages 35 and 44. It is also important to note that Type 9 found all the dimensions to be very important reasons for coming to the visitor center.

Among the individual variables, the number of times respondents had visited the Cranberry Mountain Visitor Center previously served to differentiate between the types. Other items where visitors expressed significant responses from the population mean include group size, whether children were along on the trip, and the information categories on safety, distances, and human history of the area. As one would expect, the types who expressed they had no children along (types 1, 2, and 10) also attached little or no importance to the family/children orientation dimension as a reason for participating in VIS programming.

The relationships among and between audience groups aid in completing our understanding of participants at Cranberry Mountain Visitor Center. Table 45 contains a verbal summary of the information presented in Table 44.

Table 45. Audience types and their characteristics for Cranberry Mountain Visitor Center.

Type	Type Description ^a	Characteristics
1	High on exploration-learning. Moderate on utility-service. Low on other dimensions.	Moderate interest in history and management information. Low interest on safety and distance information. Moderate group sizes (3 to 5), and tends to have visited area 3 times before. Tend to not have children along. Tend to have some college education.
2	Moderate on affiliation, exploration-learning, and utility-service. Low on introspection and family togetherness.	Moderate interest in history and safety information. Tends to have visited area 3 times previously. Tend to not have children along. Tend to have some college education.
3	Low on all dimensions.	Moderate interest in most categories of information. Moderate number of times visited previously. Tend to have some college education.
4	Moderate on family-togetherness and exploration-learning. Low on introspection, affiliation, and utility-service.	Low to moderate interest in most information. Tend to visit area 3 times previously. Group sizes between 3 and 5 people. Tend to have children along.
5	High on family-togetherness and exploration-learning. Moderate on affiliation. Low on introspection and utility-service.	High to moderate interest in wildlife, plant, ecology, and weather information. Tend to have visited area 3 times previously. Groups of 3 to 5 people. Tend to not consider Cranberry as final destination. Tend to have children along.
6	Moderate in all dimensions.	Moderate interest in most types of orientational types of information. Tend to have visited area 3 times previously. Tend to be female and between the ages of 35 and 44.
7	Moderate in all dimensions except introspection, where this type expressed low interests.	Moderate interest in most types of orientational types of information. Tend to have visited before, approximately 4 times. Destination usually elsewhere. Tend to have children along. Tend to have some college education.

Table 45--Continued.

Type	Type Description ^a	Characteristics
8	High in all dimensions except low in utility-service.	Moderate to high interest in most information categories. Tend to have visited before, and approximately 4 times previously. Tend to stay around area two days. Group sizes of 3 to 5 people.
9	High in all dimensions.	Moderate to high interest in all categories of information. Tend to have visited area before, approximately 4 times previously. Group sizes of 3 to 5 people. Tend to be between the ages of 35 to 44 years of age.
10	High on introspection, affiliation, and exploration-learning. Low on family togetherness and utility-service.	High interest in plant information. Tend to have visited area 3 times before. Group sizes 3 to 5 people. Tend to not have children along. Tend to have some college education.
11	High on affiliation, family togetherness, and exploration-learning. Moderate on introspection. Low on utility-service.	Moderate to high interest in most types of information. Tend to have visited area before, and approximately 4 times previously. Groups of 3 to 5 people. Tend to have children along.

^aFor type description and characteristics, values of 1-2 were considered Low, 3-4 Moderate, and 5-6 High.

IV. VISITOR CENTER COMPARISONS

This section contains a discussion of the results of visitor center settings at both study areas. Composite audience profiles and audience diversity are compared for each visitor center setting in an attempt to identify visitor characteristics which can usefully serve VIS personnel in planning programs.

Composite Audience Profiles

Both Cranberry Mountain and Flaming Gorge visitors attached similar levels of importance to the reasons for participating in visitor center programs. Of the twelve reasons listed, visitors assigned values of quite important or higher (4.0 on a 6.0 scale; Table 46) to the following reasons:

- To look at exhibits,
- To experience natural stimuli,
- To get information about the area,
- Exploration/Learning,
- To learn what to do in the area.

Similarly, visitors at both study areas attached values of little or no importance (2.0 on a 6.0 scale) to affiliation among unknown people and lack of something better to do.

Several differences occurred, however, among the mean values of the reasons for participating. In the Flaming Gorge settings, the highest mean score value was for looking at exhibits (4.7 and 5.0 on a 6.0 scale, or very important). At Cranberry Mountain, the highest mean score value was for experiencing natural stimuli (4.6 on a 6.0 scale, or very important).

Table 46. Reasons for participating in VIS programs at visitor center settings.

Reason	-----MEAN VALUE ^a -----		
	Flaming Gorge National Recreation Area Dam Visitor Center	Red Canyon Visitor Center	Cranberry Mountain Visitor Center
Look at Exhibits	4.7	5.0	4.6
Experience Natural Stimuli	4.5	4.8	5.0
Get Information About Area	4.0	4.3	4.2
Exploration/Learning	3.9	4.1	4.4
Learn What to Do in the Area	3.6	3.8	4.0
Family/Children Orientation	3.4	3.5	3.6
Affiliation-Within Group	3.0	3.1	3.8
Utility-Service	2.3	2.3	2.6
Introspection	2.1	2.3	2.9
Exercise	2.1	2.1	3.1
Affiliation-Outgroup	1.9	1.9	2.3
Lack of Something Better	1.7	1.5	2.0

^aScore Range: 1-6 where 1 represents Not Important and a 6 represents Extremely Important (see Q1, Appendix A).

Although the mean scores for the reasons varied among the settings, it is important to recognize that the interpretation of these values remains the same (e.g., scores of 4.7 and 5.2 are interpreted to mean very important, corresponding to 5.0 on a 6.0 scale). The distinction that can be made between mean scores is in the relative frequency with which visitors responded positively toward one end of the scale. Thus, the reason looking at exhibits had a higher proportion of visitors at Flaming Gorge responding positively to its importance (5.0 and 4.7) than at Cranberry Mountain (4.6). However, visitors at both study areas felt that looking at exhibits was a "very important" reason for coming to the visitor centers.

Some variation occurred among reasons where values of little to quite important were given. Cranberry Mountain visitors expressed more importance than Flaming Gorge respondents to the reasons of exercise, introspection, utility-service, and affiliation among known people (Table 46). Of these reasons, Flaming Gorge mean score values were approximately one point lower on the 6.0 scale than the Cranberry Mountain scores.

Although some differences exist among reasons for participating between study areas, several conclusions can be drawn. First, it appears that visitors place more importance on programs with interpretive themes than orientation themes. Second, visitors place less importance on the utility-service functions of the center, programs evolving around introspective themes, meeting new people, exercise, and programs designed as time-fillers.

The results across study areas for question Q2, the types of information desired, are shown in Table 47. Visitors attached similar levels of importance to all of the categories of information. Highest levels of importance were given to information on wildlife, geology, human history, and plants (5.0 on a 6.0 scale). Visitors also expressed that they were quite interested in information on ecology, things to do in the area, maps of the region,

Table 47. Degree of interest in selected types of information for visitors to visitor center settings.

Type of Information	-----MEAN VALUE ^a -----		
	Flaming Gorge National Recreation Area		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
Wildlife	4.9	5.1	5.2
Geology	4.8	4.9	4.6
Human History	4.5	4.8	4.4
Plants	4.4	4.8	5.0
General Ecology	3.8	4.1	4.2
Things to Do in Area	3.8	4.3	4.0
Maps of Region	3.7	3.9	4.0
Management of National Forest Lands	3.6	3.7	3.9
Places to Camp	3.2	3.3	3.1
Weather	3.0	3.4	3.4
Distances	3.0	3.2	3.0
Safety	2.9	3.3	3.2
Overnight Accommodations Other Than Camping	2.4	2.5	2.4

^aScore Range: 1-6, where 1 represents Not Interested and a 6 represents Extremely Interested.

and management of National Forest lands (4.0 on a 6.0 scale). The remaining five categories of information were found to be somewhat important (3.0 on a 6.0 scale).

Some slight variation occurred in the order of preference between several categories of information. These included places to camp, weather, distances, and safety information. Red Canyon visitors ranked these categories similarly to Cranberry Mountain Visitors, with weather, safety, places to camp, and distances ranked 9th, 10th, 11th, and 12th, respectively. However, visitors at the Dam Center expressed a different order of preference, with places to camp, weather, distances, and safety ranked 9th, 10th, 11th, and 12th, respectively. One reason that may account for the differences is the relative location of visitor centers to camping areas. The Dam Visitor Center is located directly on a major thoroughfare and receives approximately twice as much visitation per day, while both Red Canyon and Cranberry Mountain Visitor centers are located in more secluded areas and are closer to the campground areas. The inference is that at Red Canyon and Cranberry Mountain, visitors may express less interest in information on places to camp since the visitors are more likely to be already situated in a campground.

The degree of interest expressed in information categories indicate that visitors show relatively more interest in natural and cultural history topics than orientation information. These findings are important to VIS personnel who have previously emphasized visitor orientation at the Dam Visitor Center in Flaming Gorge. The results once again suggest that programs emphasizing natural and cultural interpretive themes may be more popular than visitor orientation programs.

Question Q3 identified the types of recreational activities that visitors engaged in during their trips. Table 48 summarizes the results. It is

Table 48. Proportion of visitors engaging in selected recreational activities at visitor center settings.

Activities	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
Camping	57	68	35
Swimming	26	30	15
Picnicking	43	51	37
Hiking or Walking on Trails	46	68	64
Trailbiking	4	4	3
Motorcycling	6	4	3
Fishing	40	42	26
Rock-collecting	20	27	15
Motorboating	22	20	a
Auto Driving for Sightseeing	69	83	69
River Rafting	15	15	a
Water-skiing	13	11	a
Backpacking	a	a	17

^aItem was not included on questionnaire.

important to note that the recreational opportunities available vary at each study area (e.g., river-rafting and water skiing are not available in the Cranberry Mountain area). Also, fluctuation in the popularity of an activity may be a reflection of several factors. First, the recreation opportunity itself may vary by study area in the quality of the experience it provides, and thus, people may choose to not engage in that activity (accounting for low popularity). Secondly, visitor centers may only attract a certain type of recreationist, and the visitors sampled may not reflect the views of other forest visitors. Thus, it is important to recognize that the results presented should only be used in the capacity of telling VIS personnel something about VIS audiences, and do not necessarily reflect the overall popularity of an activity among all forest recreationists.

Among those activities pursued by visitors at each of the settings, auto driving for sightseeing was the most popular. Other popular activities included camping, hiking, picnicking, fishing, and swimming. These activities were ordered the same across all the settings, according to the relative proportion of visitors engaging in that activity for each setting. The less popular activities among visitor center respondents included trailbiking, motorcycling, and rock-collecting.

Questions Q4, Q5, and Q6 asked about the types of trips visitors engaged in, and how their coming to the visitor center fit within the context of the trip. Question Q4 asked visitors how many times they had previously visited the area (Table 49). The results indicate that over half of the visitors at each setting had never visited the area before, but that Flaming Gorge showed a noticeably higher percentage of visitors who had never visited before (70 and 73 percent). Question Q5 asked visitors how long they planned on spending in the area (Table 50). These results indicate that at all of the settings most of the use was day-use, but Flaming Gorge visitors tended to stay longer.

Table 49. Degree of previous visitation to the visitor centers.

Degree of Visitation	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
Never Before	70	73	57
One time	5	4	10
Two	8	9	7
Three	4	4	6
Four	3	2	5
Five	2	-	2
Over Five	9	8	13

Table 50. Number of days visitor center respondents spent in the study area..

Number of Days	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
One day or less	47	36	63
Two	21	25	17
Three	16	16	10
Four	9	7	3
Five	4	4	2
Over Five	5	11	5

Red Canyon showed the highest proportion of visitors staying over five days. Question Q6 asked visitors whether or not they considered the study area to be the primary destination of their trip. The results in Table 51 indicate that while about half the respondents at the Flaming Gorge visitor centers considered Flaming Gorge their primary destination, only 40 percent of the respondents at Cranberry Mountain considered Cranberry their primary destination.

Both the Utah and West Virginia studies indicate that easily accessible visitor centers tended to attract more day users. This finding suggests that VIS programs might be modified according to the context of visitor trips. For example, centers (such as Red Canyon) located in the more remote locations tend to attract those visitors spending more than one day in the area, and programming could be developed to offer a wider variety and depth of interpretive services in these settings.

Questions Q7 through Q12 asked a series of socioeconomic questions. Question Q7 asked for the respondent's zip code and the results are shown in Table 52. For both study areas, better than 75 percent of the visitors came from the multi-state region where the center was located. Question Q8 results are reported in Table 53 and show the size of groups that respondents came in during their visit. The results are similar for all the visitor centers, where groups of 3 to 5 people showed the highest proportion of visitation. In contrast, groups of one, or over 16 people, showed the lowest proportions. Question Q9 asked about the presence of children and their ages. Table 54 shows that at Flaming Gorge half the respondents had children along, while at Cranberry Mountain only 44 percent had children present.

Table 51. Trip destinations of visitors at the visitor centers.

Destination	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain
	Dam Visitor Center	Red Canyon Visitor Center	Visitor Center
Study Area Considered	48	51	40
Passing Through on Way to Somewhere Else	52	49	60

Table 52. Residential origins for the sample of visitors at the visitor centers.

State	-----NUMBER (PERCENT)-----		
	Flaming Gorge National Recreation Area		Cranberry Mountain
	Dam Visitor Center	Red Canyon Visitor Center	Visitor Center
<u>Northeast:</u>			
Connecticut	2 (a)		
Delaware		1 (a)	
Maryland	1 (a)	1 (a)	26 (5)
Massachusetts	2 (a)		1 (a)
New Jersey		2 (a)	3 (a)
New York	2 (a)	5 (1)	1 (a)
Pennsylvania	1 (a)	5 (1)	23 (5)
Vermont	1 (a)		
Washington, D.C.		1 (a)	3 (a)
	<u>9 (3)</u>	<u>15 (4)</u>	<u>57 (10)</u>
<u>Southeast:</u>			
Alabama			2 (a)
Florida	2 (a)	3 (a)	11 (1)
Georgia	3 (a)		1 (a)
Kentucky	1 (a)		6 (1)
Tennessee	1 (a)	2 (a)	4 (1)
Virginia	1 (a)	2 (a)	46 (9)
West Virginia			355 (61)
North Carolina			7 (1)
South Carolina			4 (1)
	<u>8 (2)</u>	<u>7 (2)</u>	<u>436 (75)</u>
<u>Upper Midwest:</u>			
Illinois	9 (3)	15 (4)	7 (a)
Indiana		1 (a)	9 (1)
Iowa	4 (1)	2 (a)	
Kansas	2 (1)	5 (1)	
Michigan	6 (2)	6 (2)	2 (a)
Minnesota	1 (a)	4 (1)	
Nebraska	4 (1)	2 (a)	
North Dakota	1 (a)		
Ohio		3 (a)	55 (12)
South Dakota		1 (a)	1 (a)
Wisconsin		5 (1)	1 (a)
	<u>31 (10)</u>	<u>44 (13)</u>	<u>75 (13)</u>

Table 52--Continued.

State	-----NUMBER (PERCENT)-----		
	Flaming Gorge National Recreation Area		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
<u>Mid-South:</u>			
Arkansas		2 (a)	1 (a)
Louisiana	1 (a)		
Missouri	5 (2)	7 (2)	5 (1)
Oklahoma	5 (2)	1 (a)	
Texas	11 (3)	6 (2)	3 (a)
	<u>22 (7)</u>	<u>16 (5)</u>	<u>9 (1)</u>
<u>West:</u>			
Arizona	7 (2)	9 (3)	1 (a)
California	30 (9)	58 (18)	2 (a)
Colorado	65 (20)	32 (10)	
Idaho	3 (a)	5 (1)	
Montana	1 (a)	1 (a)	
New Mexico	4 (1)	2 (a)	
Nevada	1 (a)	3 (a)	
Oregon	3 (a)	8 (2)	
Utah	131 (40)	128 (38)	
Wyoming	12 (4)	6 (2)	
Washington	2 (a)	3 (a)	
	<u>259 (78)</u>	<u>255 (76)</u>	<u>3 (1)</u>
TOTALS	329 (100)	337 (100)	580 (100)

^aLess than one percent.

Table 53. Size of groups visiting the visitor centers.

Group Size	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
Self Only	2	2	2
2	35	33	28
3-5	45	40	48
6-10	14	21	16
11-15	4	2	4
16-21	0	1	2
Over 21	0	1	1

Table 54. Proportion of adult visitors who brought children to the visitor centers and age profiles of those children.

Brought Children	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain
	Dam Visitor Center	Red Canyon Visitor Center	Visitor Center
No	50	50	56
Yes	50	50	44

Question Q10 asked respondents about the highest year of school completed. Table 55 indicates that the Flaming Gorge visitors tended to have more college education. A higher proportion of Cranberry Mountain visitors did not complete high school, while the Utah settings both displayed higher proportions of people who had over five or more years of college-level education.

Question Q11 asked the sex of the respondent, and the results are displayed in Table 56. Although both the Dam Visitor Center and Cranberry Mountain Visitor Center displayed equal ratios of males and females, at Red Canyon Visitor Center there were 14 percent more males than females.

Finally, question Q12 asked the age of the respondent, and the results are displayed in Table 57. The age profiles of VIS audiences between settings shows little variation, except at Cranberry Mountain, where a slightly higher proportion of adults were found between ages 18 and 33.

Audience Diversity

Five dimensions were selected from the cluster analysis to identify types of audience members in the two study areas. The dimensions included (1) Family/Children Orientation, (2) Exploration-Learning, (3) Affiliation-Within Group, (4) Introspection, and (5) Utility-Service. Data were combined for the two visitor centers in Flaming Gorge because of the audience's basic similarity in reasons for participating in visitor center activities (Table 46). Twelve audience groups were found in the Flaming Gorge Study, and eleven audience groups were found at Cranberry Mountain.

Table 58 shows the visitor center audience types and variable correlations for both study areas. The left-hand column identifies the audience types and their mean scores for each dimension. The right side shows type means that are significantly different ($\alpha \leq 0.05$) from the population mean

Table 55. Educational distribution of visitors at the visitor centers.

Highest Grade Completed	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain
	Dam Visitor Center	Red Canyon Visitor Center	Visitor Center
Grade			
8	1	2	4
9	1	1	2
10	2	2	3
11	2	2	2
12	32	30	40
College			
1	7	6	6
2	10	11	6
3	7	9	6
4	14	15	12
5 and over	24	24	19

Table 56. Proportion of males and females visiting the visitor centers.

Sex	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
Female	49	43	49
Male	51	57	51

Table 57. Age distribution of visitors to visitor centers.

Age	-----PERCENT-----		
	<u>Flaming Gorge National Recreation Area</u>		Cranberry Mountain Visitor Center
	Dam Visitor Center	Red Canyon Visitor Center	
18-24	10	11	18
25-34	27	22	27
35-44	22	24	19
45-54	19	25	19
55-64	17	14	12
65 and Over	6	4	5

Table 58. Visitor centers audience types and variable correlations, with types on the left and type means significantly different ($\alpha \leq .05$) than the population mean on the right.

	DIMENSIONS ^a						INFORMATION WANTS												OTHER							
	Type Number	Introspection	Affiliation-Within Group	Family/Children Orien.	Exploration-Learning	Utility-Service	Geology	Wildlife	Plants	Human History	Management	Ecology	Camping Places	Accommodations	Maps	Weather	Things to Do	Distance	Safety	Days Will Stay	Destination ^b	Group Size ^c	Children Along ^d	School Completed ^e	Sex ^f	Age ^g
FLAMING GORGE	1	1	1	2	2	1	3.8	3.9	3.5	3.8	2.0	2.2	2.4	1.4	2.7	2.0	3.1	1.8	1.6			2.5	1.3	14		3.7
	2	1	2	2	4	3			4.2	4.2	3.2				4.4			3.5		1.8	1.7	2.3	1.1			
	3	1	1	2	4	1	4.6	4.6	4.3	3.9	2.9	3.7	2.4	1.9	3.1	2.4	3.2	2.3	2.0	1.8	1.8	2.4	1.2	15		3.7
	4	1	2	5	5	2	5.2	5.4				4.5					4.3					3.2	1.9			
	5	2	5	2	5	2														2.0		2.6	1.1			
	6	2	3	4	3	3	4.2	4.5	4.1	4.0		3.0				2.7	3.6	2.5			1.3	3.3	1.7		1.3	2.8
	7	2	4	5	4	1									3.7	2.8	5.0			2.7	1.4	3.5	1.8			3.0
	8	3	4	4	5	4		5.4	4.8	5.1	4.4	4.4	4.5	3.4	5.0	4.4		4.3	4.2	2.7	1.3		1.6			2.9
	9	4	3	2	5	2	5.3		5.1	5.2	4.2	5.0							3.6	1.7	1.7	2.0	1.1		1.3	
	10	3	3	5	5	2	5.3	5.4	4.9	5.1	4.4	4.8						3.8	4.2		1.4	3.5	1.9	13		
	11	2	5	5	5	2	5.2	5.4		5.1							4.5				1.4	3.4	1.9			
	12	5	5	5	5	2	5.4	5.5	5.4	5.6	4.9	4.8	3.7	3.6	3.8	4.0	4.5	4.0	4.7	3.1	1.3			13		
	\bar{X}	2.3	3.2	3.6	4.3	2.1	4.9	5.0	4.6	4.7	3.7	3.9	3.3	2.5		3.2	4.0	3.1	3.1	2.3	1.5	2.9	1.5	14	1.5	3.2
CRANBERRY MOUNTAIN	1	1	1	2	4	3				3.7	3.0							2.1	2.0			2.6	1.1	15		
	2	2	4	2	4	3				3.7									2.6				1.1	14		
	3	2	2	2	2	2	3.8	4.5	4.3	3.3	3.0	3.2			3.3		3.1	2.3	2.1					14		
	4	2	2	4	4	2	3.9	4.6	4.4	3.8			2.4		3.1	2.5		2.4	2.5			3.3	1.8			
	5	2	4	5	5	1		5.4	5.3			4.6				2.7					1.6	3.3	1.6			
	6	4	4	4	4	3					4.2	4.4	3.4	2.8	4.2	3.8	4.4	3.5	3.7						1.6	3.2
	7	2	3	4	4	4				4.7				2.8	4.3	3.8	4.3	3.4			1.8		1.7	14		
	8	5	5	5	6	2	5.2	5.6	5.6	5.0	4.5	4.6				3.6	4.4	3.3	3.7	2.4		3.3	1.7			
	9	5	5	5	5	5	5.3	5.5	5.4	5.2	5.2	4.8	4.1	3.7	4.8	4.3	5.0	4.1	4.5			3.2				3.4
	10	4	5	2	5	2			5.3													3.3	1.2	14		
	11	3	5	5	5	2	4.8	5.6	5.4	5.3	4.5	4.5			4.3		4.3	3.4	3.9			3.3	1.7			
		\bar{X}	2.9	3.6	3.6	4.4	2.6	4.6	5.2	5.0	4.4	4.0	4.2	3.1	2.4	4.0	3.4	4.0	3.0	3.2	1.8	1.6	3.0	1.5	13	1.5

^aScore range: 1-6, where 1 represents Not Important and 6 represents Extremely Important.^bAnswers coded 1 (study area as trip destination) and 2 (elsewhere). (See question 6, Appendix A.)^cAnswers coded 1 (self), 2 (2), 3 (3-5), 4 (6-10), 5 (11-15), 6 (16-21) and 7 (over 21). (See Q8, Appendix A.)^dAnswers coded 1 (No children along) and 2 (Children along). (See Q9, Appendix A.)^eAnswers coded by year of school completed (e.g., 13 represents one year college, and 17 represents greater than 4 years in college). (See Q10, Appendix A.)^fAnswers coded 1 (male) and 2 (female). (See Q11, Appendix A.)^gAnswers coded 1 (18-24), 2 (25-34), 3 (35-44), 4 (45-54), 5 (55-64), and 6 (65 and over). (See Q12, Appendix A.)

for each variable. Values for the dimensions and information wants correspond to a 6.0 scale where 1.0 represents Not Important and 6.0 represents extremely important.

Several of the audience groups between the study areas showed similar patterns in levels of importance assigned to the dimensions. At Flaming Gorge, Type 1 attached little or no importance to all five dimensions. Type 3 in the Cranberry study followed the same pattern. For these types it appears that there is little that VIS personnel can do in programming that will add to these visitors' satisfaction since they tend to be non-specific in their interests. In contrast, Type 12 of the Flaming Gorge study gave a high amount of importance to all of the dimensions except utility-service. In the Cranberry Mountain visitor profile, Type 8 showed a similar pattern, with all dimensions rated as very important except utility-service.

Some variation occurred in the level of importance that groups attached to each dimension. For introspection, only 2 out of 12 types in the Flaming Gorge study assigned this dimension a value of quite important or more (4.0 on a 6.0 scale). In contrast, 4 out of 11 groups in the Cranberry Mountain study gave introspection a value of quite important. The average score for types at Flaming Gorge was 2.3 (of a little importance) compared to 2.9 (somewhat important) for Cranberry Mountain types. Similarly, visitors at Cranberry Mountain tended to attach more importance to the utility-service dimension. The average among the Flaming Gorge types was 2.1 (of a little importance) compared to 2.6 (somewhat important) for Cranberry Mountain.

Similar patterns can be found among the audience types in how they assigned levels of importance to information wants. Both Type 3 of the Flaming Gorge and Type 10 of Cranberry Mountain were non-specific in assigning importance levels to any of the categories of information.

The average level of importance displayed for each information category varied only slightly between study areas. As one would expect, the mean value for geological information was higher (4.9) among Flaming Gorge groups than Cranberry groups (4.6). Conversely, Cranberry groups expressed a higher mean value (5.0) for information on plants than the Flaming Gorge groups (4.6). These results are likely a reflection of the outstanding natural resource features in the respective settings, where geological formations at Flaming Gorge are an outstanding resource, and where the unique plant species found in the Glades Botanical Area at Cranberry Mountain are significant.

Among the other variables subjected to the cluster analysis, more patterns can be identified. Where significant correlations occurred between types, the presence of children tended to be most distinguishing. Eleven out of the 12 audience groups of Flaming Gorge showed significant results, while 8 out of 11 groups at Cranberry Mountain consistently expressed the presence or absence of children. Group size served as another distinguishing variable among types at both study areas. While the variables of destination and days will stay proved to discriminate among types at Flaming Gorge, these variables did not do the same in the Cranberry Mountain study.

APPENDIX A
QUESTIONNAIRES

U.S. FOREST SERVICE
VISITOR INFORMATION SERVICE USE STUDY

- Q1. There are many reasons why people choose to come to visitor centers such as this one. Below and on the next two pages we have listed some of the reasons given to us in the past. We would like for you to rate the importance of each of them to you, when you first decided to come here.

You may notice a small degree of repetition in the reasons. This is necessary to increase the accuracy of the results.

Please think back to when you first decided to come to this visitor center. Then check how important each of the following reasons seemed to you at that time.

Reason for Coming	Extremely Important	Very Important	Quite Important	Somewhat Important	Of a Little Importance	Not Important
1. For a change of pace						
2. To be exposed to new things						
3. I thought it would be fun						
4. I thought it would be a good experience for the family						
5. To be close to nature						
6. Because it would give my mind a rest						
7. To get information about the area						
8. To experience new and different things						
9. So my children could learn things here						
10. To see new faces						
11. I thought it would be a chance to do something different						

Reason for Coming	Extremely Important	Very Important	Quite Important	Somewhat Important	Of a Little Importance	Not Important
12. To improve my physical health						
13. I thought I would like the company of the people who came with me						
14. To think about who I am						
15. To observe the beauty of nature						
16. To find out about things						
17. For a chance to meet new people						
18. For the exercise						
19. To learn what there is to do in the area						
20. So the family could do something together						
21. To help me understand what life is all about						
22. Because of the sense of discovery here						
23. It was just something to do with my time						
24. So my mind can move at a slower pace						
25. To be with people who are enjoying themselves						
26. To explore things						
27. To be entertained						
28. To talk to new and varied people						
29. To teach my children about things here						
30. To think about my personal values						
31. So I could learn something new						
32. Because I didn't have anything better to do						
33. So I could do something with my companions						
34. To increase my knowledge						
35. To help put variety in my life						

The following reasons are a bit more specific. Again, please think back to when you first decided to come to this visitor center and check how important each reasons seemed to you at that time.

Reason for Coming	Extremely Important	Very Important	Quite Important	Somewhat Important	Of a Little Importance	Not Important
36. To obtain a map of the area						
37. To use the rest-room facilities						
38. To get a drink of water						
39. To see where I can find a place to stay overnight						
40. For a break from driving						
41. To look at the exhibits here						

Q2. Information about several different subjects could be made available to you at this visitor center. The managers of the area would like to know which subjects or types of information are most interesting to you. Please check how interested you would be in having information available at this visitor center on each of the following subjects.

Subject or Type of Information	Extremely Interested	Very Interested	Quite Interested	Somewhat Interested	Of a Little Interest	Not Interested
1. Geology of the area						
2. Wildlife of the area						
3. Plants of the area						
4. Human history of the area						

Subject or Type of Information	Extremely Interested	Very Interested	Quite Interested	Somewhat Interested	Of a Little Interest	Not Interested
5. Management of National Forest lands						
6. General ecology (interrelatedness of things)						
7. Places to camp						
8. Overnight accommodations other than camping						
9. Maps of the region						
10. Weather information						
11. Things to do in the area						
12. Distance to other recreation areas, cities, etc.						
13. Safety information						
14. Other (Please list)						

Q3. Please place a check by each of the following activities in which you have participated, or in which you intend to participate, during this visit to Flaming Gorge.

- | | |
|--|---|
| <input type="checkbox"/> Camping | <input type="checkbox"/> Fishing |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Rock-collecting |
| <input type="checkbox"/> Picnicking | <input type="checkbox"/> Motorboating |
| <input type="checkbox"/> Hiking or walking on trails | <input type="checkbox"/> Auto driving for sightseeing |
| <input type="checkbox"/> Trailbiking | <input type="checkbox"/> River rafting |
| <input type="checkbox"/> Motorcycling | <input type="checkbox"/> Water skiing |

Q4. Have you ever visited this particular visitor center in the past?
(Please check one)

- ☐ No, please go to Q5.
☐ Yes, continue:

Please indicate the total number of times:

 1 2 3 4 5 Over 5

Q5. All together, how many days will you spend in Flaming Gorge National Recreation Area during this trip? (Please check one)

1 day 2 days 3 days 4 days 5 days Over 5 days
or less

- Q6. Do you consider Flaming Gorge to be your major destination on this trip, or are you just passing through on the way to somewhere else? (Please check one)

Major destination

Passing through

Finally, we have just a few personal questions which help us to learn who we are serving. Remember, all information is strictly confidential.

- Q7. What is your zip code? _____

- Q8. What is the total size of the group that accompanied you to this visitor center including yourself?

Self only	2	3-5	6-10	11-15	16-21	Over 21
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- Q9. Did any children come with you to this visitor center?

No, please go to Q10. Yes, please continue:

Please indicate the ages of these children by writing in the number of children which are within each of the age groups below:

[illegible]

- Q10. What is the highest year of school that you have completed? (Please circle one)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17+
Elementary								High School				College				

- Q11. Your sex:

Male	Female
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
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81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

- Q12. What was your age last birthday?

<u>18-24</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>	<u>Over 65</u>
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* * * * *

Thank you very much

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U.S. FOREST SERVICE
VISITOR INFORMATION SERVICE USE STUDY

- Q1. There are many reasons why people choose to attend amphitheatre interpretive programs such as this one. Below and on the next page we have listed some of the reasons given to us in the past. We would like for you to rate the importance of each of them to you, when you first decided to come here.

You may notice a small degree of repetition in the reasons. This is necessary to increase the accuracy of the results.

Please think back to when you first decided to attend this amphitheatre program. Then check how important each of the following reasons seemed to you at that time.

Reason for Coming	Extremely Important	Very Important	Quite Important	Somewhat Important	Of a Little Importance	Not Important
1. For a change of pace						
2. To be exposed to new things						
3. I thought it would be fun						
4. I thought it would be a good experience for the family						
5. To be close to nature						
6. Because it would give my mind a rest						
7. To get information about the area						
8. To experience new and different things						
9. So my children could learn things here						
10. To see new faces						
11. I thought it would be a chance to do something different						

Reason for Coming	Extremely Important	Very Important	Quite Important	Somewhat Important	Of a Little Importance	Not Important
12. To improve my physical health						
13. I thought I would like the company of the people who came with me						
14. To think about who I am						
15. To observe the beauty of nature						
16. To find out about things						
17. For a chance to meet new people						
18. For the exercise						
19. To learn what there is to do in the area						
20. So the family could do something together						
21. To help me understand what life is all about						
22. Because of the sense of discovery here						
23. It was just something to do with my time						
24. So my mind can move at a slower pace						
25. To be with people who are enjoying themselves						
26. To explore things						
27. To be entertained						
28. To talk to new and varied people						
29. To teach my children about things here						
30. To think about my personal values						
31. So I could learn something new						
32. Because I didn't have anything better to do						
33. So I could do something with my companions						
34. To increase my knowledge						
35. To help put variety in my life						

- Q2. Information about several different subjects could be made available to you at this amphitheatre program. The managers of the area would like to know which subjects or types of information are most interesting to you. Please check how interested you would be in having information available at this amphitheatre program on each of the following subjects.

Subject or Type of Information	Extremely Interested	Very Interested	Quite Interested	Somewhat Interested	Of a Little Interest	Not Interested
1. Geology of the area						
2. Wildlife of the area						
3. Plants of the area						
4. Human history of the area						
5. Management of National Forest lands						
6. General ecology (interrelatedness of things)						
7. Places to camp						
8. Overnight accommodations other than camping						
9. Maps of the region						
10. Weather information						
11. Things to do in the area						
12. Distance to other recreation areas, cities, etc.						
13. Safety information						
14. Other (Please list)						

- Q3. Please place a check by each of the following activities in which you have participated, or in which you intend to participate, during this visit to Flaming Gorge.

☐ Camping
☐ Swimming
☐ Picnicking
☐ Hiking or walking on trails
☐ Trailbiking
☐ Motorcycling

☐ Fishing
☐ Rock-collecting
☐ Motorboating
☐ Auto driving for sightseeing
☐ River rafting
☐ Water skiing

Q4. Have you ever visited this particular amphitheatre for an interpretive program in the past? (Please check one)

☐ No, please go to Q5. ☐ Yes, continue:

Please indicate the total number of times:

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Over 5

Q5. All together, how many days will you spend in Flaming Gorge National Recreation Area during this trip? (Please check one)

☐ 1 day or less ☐ 2 days ☐ 3 days ☐ 4 days ☐ 5 days ☐ Over 5 days

Q6. Do you consider Flaming Gorge to be your major destination on this trip, or are you just passing through on the way to somewhere else? (Please check one)

☐ Major destination ☐ Passing through

Finally, we have just a few personal questions which help us to learn who we are serving. Remember, all information is strictly confidential.

Q7. What is your zip code? _____

Q8. What is the total size of the group that accompanied you to this amphitheatre program including yourself?

☐ Self only ☐ 2 ☐ 3-5 ☐ 6-10 ☐ 11-15 ☐ 16-21 ☐ Over 21

Q9. Did any children come with you to this amphitheatre program?

☐ No, please go to Q10. ☐ Yes, please continue:

Please indicate the ages of these children by writing in the number of children which are within each of the age groups below:

☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-19 years

Q10. What is the highest year of school that you have completed? (Please circle one)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17+
Elementary High School College

Q11. Your sex:

☐ Male ☐ Female

Q12. What was your age last birthday?

☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ Over 65

* * * * *

Thank you very much

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LITERATURE CITED

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